



# TEST REPORT

No. I21N04025-RF-LTE

for

**Guangdong OPPO Mobile Telecommunications Corp., Ltd.**

**Mobile Phone**

**Model Name: CPH2363**

**FCC ID: R9C-CPH2363**

with

**Hardware Version: 11**

**Software Version: ColorOS V12.1**

**Issued Date` : 2022-01-13**

**Note:**

The test results in this test report relate only to the devices specified in this report. This report shall not be reproduced except in full without the written approval of SAICT.

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No. I21N04025-RF-LTE

## **REPORT HISTORY**

<b>Report Number</b>	<b>Revision</b>	<b>Description</b>	<b>Issue Date</b>
I21N04025-RF-LTE	Rev.0	1st edition	2022-01-13



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## 1. SUMMARY OF TEST REPORT

### 1.1. Test Items

Description	Mobile Phone
Model Name	CPH2363
Applicant's name	Guangdong OPPO Mobile Telecommunications Corp., Ltd.
Manufacturer's Name	Guangdong OPPO Mobile Telecommunications Corp., Ltd.

### 1.2. Test Standards

FCC Part 2/22/24/27/90	10-1-19 Edition
ANSI C63.26	2015
KDB971168 D01	v03r01

### 1.3. Test Result

All test items are passed. Please refer to "6 Summary of Test Results" for detail.

### 1.4. Testing Location

Address: Building G, Shenzhen International Innovation Center, No.1006 Shennan Road, Futian District, Shenzhen, Guangdong, P. R. China 518000

### 1.5. Project Data

Testing Start Date: 2021-12-21                      Testing End Date: 2022-01-13

### 1.6. Signature

Tan Pei

(Prepared this test report)

Huang Qiuqin

(Reviewed this test report)

Zhang Hao

(Approved this test report)



## **2. CLIENT INFORMATION**

### **2.1. Applicant Information**

Company Name: Guangdong OPPO Mobile Telecommunications Corp., Ltd.  
Address /Post: NO.18 Haibin Road, Wusha Village, Chang'an Town, Dongguan City,  
Guangdong, China  
Contact Person: Mei XiLi  
Contact Email: meixili@oppo.com  
Telephone: (86)76986076999  
Fax: /

### **2.2. Manufacturer Information**

Company Name: Guangdong OPPO Mobile Telecommunications Corp., Ltd.  
Address /Post: NO.18 Haibin Road, Wusha Village, Chang'an Town, Dongguan City,  
Guangdong, China  
Contact Person: Mei XiLi  
Contact Email: meixili@oppo.com  
Telephone: (86)76986076999  
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**3. EQUIPMENT UNDER TEST (EUT) AND ANCILLARY EQUIPMENT**

**(AE)**

**3.1. About EUT**

Description	Mobile Phone
Model Name	CPH2363
FCC ID	R9C-CPH2363
Frequency Bands	LTE Bands 2,4,5,7,12,17,18,19,26,38,41 (2535MHz~2655MHz), 66
Antenna	Integrated
Extreme vol. Limits	3.60V to 4.45V (nominal: 3.87V)
Condition of EUT as received	No abnormality in appearance

**3.2. Internal Identification of EUT used during the test**

<b>EUT ID*</b>	<b>IMEI</b>	<b>HW Version</b>	<b>SW Version</b>	<b>Sample Arrival Date</b>
UT01aa	861150050032755	11	ColorOS V12.1	2021-12-23
UT07aa	861150050033076	11	ColorOS V12.1	2021-12-23

\*EUT ID: is used to identify the test sample in the lab internally.  
UT07aa is used for conduction test, UT1aa is used for radiation test.

**3.3. Internal Identification of AE used during the test**

<b>AE ID*</b>	<b>Description</b>
AE1	Battery
AE2	Charger
AE3	USB Cable
AE4	Headset
AE5	RF Cable
AE1	
Model	BLP907
Manufacturer	Sunwoda Electronic Co., Ltd.
Capacity	4385mAh
Nominal Voltage	3.87 V
AE2	
Model	VCB3HDUH
Manufacturer	Shenzhen Huntkey Electric Co., Ltd.
Specification	American Standard Charger
AE3	
Model	DL143
Manufacturer	/
AE4	
Model	MH157
Manufacturer	/

\*AE ID: is used to identify the test sample in the lab internally.



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### **3.4. General Description**

The Equipment Under Test (EUT) is a model Mobile Phone with integrated antenna. It consists of normal options: lithium battery, charger. Manual and specifications of the EUT were provided to fulfil the test. Samples undergoing test were selected by the Client.



#### **4. REFERENCE DOCUMENTS**

The following documents listed in this section are referred for testing.

<b>Reference</b>	<b>Title</b>	<b>Version</b>
FCC Part 22	PUBLIC MOBILE SERVICES	10-1-19 Edition
FCC Part 24	PERSONAL COMMUNICATIONS SERVICES	10-1-19 Edition
FCC Part 2	FREQUENCY ALLOCATIONS AND RADIO TREATY MATTERS; GENERAL RULES AND REGULATIONS	10-1-19 Edition
FCC Part 27	MISCELLANEOUS WIRELESS COMMUNICATIONS SERVICES	10-1-19 Edition
FCC Part 90	PRIVATE LAND MOBILE RADIO SERVICES	10-1-19 Edition
ANSI C63.26	American National Standard for Compliance Testing of Transmitters Used in Licensed Radio Services	2015
KDB971168 D01	Power Meas License Digital Systems	v03r01





## 5. LABORATORY ENVIRONMENT

**Shielded room** did not exceed following limits along the RF testing:

Temperature	Min. = 15 °C, Max. = 35 °C
Relative humidity	Min. = 20 %, Max. = 75 %
Shielding effectiveness	0.014MHz-1MHz>60 dB; 1MHz-18000MHz>90 dB
Electrical insulation	>2 MΩ
Ground system resistance	< 4 Ω

**Fully-anechoic chamber** did not exceed following limits along the EMC testing

Temperature	Min. = 15 °C, Max. = 35 °C
Relative humidity	Min. = 20 %, Max. = 75 %
Shielding effectiveness	0.014MHz-1MHz> 60 dB; 1MHz-18000MHz>90 dB
Electrical insulation	> 2MΩ
Ground system resistance	< 4 Ω
Voltage Standing Wave Ratio (VSWR)	≤ 6 dB, from 1 to 18 GHz, 3 m distance
Uniformity of field strength	Between 0 and 6 dB, from 80 to 6000 MHz



## 6. SUMMARY OF TEST RESULTS

Abbreviations used in this clause:		
Verdict Column	P	Pass
	F	Fail
	NA	Not applicable
	NM	Not measured
Location Column	A/B/C/D	The test is performed in test location A, B, C or D which are described in section 1.4 of this report

NOTE: As the frequency band range of LTE Band 41(2545-2655MHz) overlaps the range of LTE Band 38(2570-2620MHz), LTE Band 26(814-849MHz) overlaps the range of LTE Band 5(824-849MHz), LTE Band 18(815-830MHz), LTE Band 19(830-845MHz), LTE Band 12(699-716MHz) overlaps the range of LTE Band 17(704-716MHz). The channel bandwidth and other perating parameters for LTE Band 38 are fully supported by LTE Band 41, the channel bandwidth and other perating parameters for LTE Band 5/18/19 are fully supported by LTE Band 26, the channel bandwidth and other perating parameters for LTE Band 17 are fully supported by LTE Band 12 and the miximum output power of LTE Band 41 is larger than the LTE Band 38, the miximum output power of LTE Band 26 is larger than the LTE Band 5/18/19, the miximum output power of LTE Band 12 is larger than the LTE Band 17, we just need to test all the cases of LTE Band 41, LTE Band 26, LTE Band 12.

### LTE Band 2

Items	Test Name	Clause in FCC rules	Section in this report	Verdict
1	Output Power	2.1046/24.232	A.1	P
2	Field Strength of Spurious Radiation	2.1053/24.238	A.2	P
3	Frequency Stability	2.1055/24.235	A.3	P
4	Occupied Bandwidth	2.1049/24.238	A.4	P
5	Emission Bandwidth	2.1049/24.238	A.5	P
6	Band Edge Compliance	2.1051/24.238	A.6	P
7	Conducted Spurious Emission	2.1051/24.238	A.7	P
8	Peak-to-Average Power Ratio	24.232/ KDB971168 D01	A.8	P

### LTE Band 4

Items	Test Name	Clause in FCC rules	Section in this report	Verdict
1	Output Power	2.1046/27.50(d)	A.1	P
2	Field Strength of Spurious Radiation	2.1053/27.53(h)	A.2	P



3	Frequency Stability	2.1055/27.54	A.3	P
4	Occupied Bandwidth	2.1049/27.53(g)	A.4	P
5	Emission Bandwidth	2.1049/27.53(g)	A.5	P
6	Band Edge Compliance	2.1051/27.53(h)	A.6	P
7	Conducted Spurious Emission	2.1051/27.53(h)	A.7	P
8	Peak-to-Average Power Ratio	27.50(d)/ KDB971168 D01	A.8	P

**LTE Band 7**

Items	Test Name	Clause in FCC rules	Section in this report	Verdict
1	Output Power	2.1046/27.50(h)	A.1	P
2	Field Strength of Spurious Radiation	2.1053/27.53(m)	A.2	P
3	Frequency Stability	2.1055/27.54	A.3	P
4	Occupied Bandwidth	2.1049/27.53(m)	A.4	P
5	Emission Bandwidth	2.1049/27.53(m)	A.5	P
6	Band Edge Compliance	2.1051/27.53(m)	A.6	P
7	Conducted Spurious Emission	2.1051/27.53(m)	A.7	P
8	Peak-to-Average Power Ratio	27.50(a)/ KDB971168 D01	A.8	P

**LTE Band 12**

Items	Test Name	Clause in FCC rules	Section in this report	Verdict
1	Output Power	2.1046/27.50(c)	A.1	P
2	Field Strength of Spurious Radiation	2.1053/27.53(g)	A.2	P
3	Frequency Stability	2.1055/27.54	A.3	P
4	Occupied Bandwidth	2.1049/27.53(g)	A.4	P
5	Emission Bandwidth	2.1049/27.53(g)	A.5	P
6	Band Edge Compliance	2.1051/27.53(g)	A.6	P
7	Conducted Spurious Emission	2.1051/27.53(g)	A.7	P
8	Peak-to-Average Power Ratio	27.50(a)/ KDB971168 D01	A.8	P



**LTE Band 26(814MHz-824MHz)**

Items	Test Name	Clause in FCC rules	Section in this report	Verdict
1	Output Power	2.1046/90.635	A.1	P
2	Field Strength of Spurious Radiation	2.1053/90.691	A.2	P
3	Frequency Stability	2.1055/90.213	A.3	P
4	Occupied Bandwidth	2.1049/90.1215	A.4	P
5	Emission Bandwidth	2.1049/90.1215	A.5	P
6	Band Edge Compliance	2.1051/90.691	A.6	P
7	Conducted Spurious Emission	2.1051/90.691	A.7	P
8	Peak-to-Average Power Ratio	KDB971168 D01	A.8	P

**LTE band 26(824MHz-849MHz)**

Items	Test Name	Clause in FCC rules	Section in this report	Verdict
1	Output Power	2.1046/22.913	A.1	P
2	Field Strength of Spurious Radiation	2.1053/22.917	A.2	P
3	Frequency Stability	2.1055/22.355	A.3	P
4	Occupied Bandwidth	2.1049/22.917	A.4	P
5	Emission Bandwidth	2.1049/22.917	A.5	P
6	Band Edge Compliance	2.1051/22.917	A.6	P
7	Conducted Spurious Emission	2.1051/22.917	A.7	P
8	Peak-to-Average Power Ratio	KDB971168 D01	A.8	P



**LTE Band 41**

Items	Test Name	Clause in FCC rules	Section in this report	Verdict
1	Output Power	2.1046/27.50(h)	A.1	P
2	Field Strength of Spurious Radiation	2.1053/27.53(m)	A.2	P
3	Frequency Stability	2.1055/27.54	A.3	P
4	Occupied Bandwidth	2.1049/27.53(m)	A.4	P
5	Emission Bandwidth	2.1049/27.53(m)	A.5	P
6	Band Edge Compliance	2.1051/27.53(m)	A.6	P
7	Conducted Spurious Emission	2.1051/27.53(m)	A.7	P
8	Peak-to-Average Power Ratio	27.50(a)/ KDB971168 D01	A.8	P

**LTE Band 66**

Items	Test Name	Clause in FCC rules	Section in this report	Verdict
1	Output Power	2.1046/27.50(d)	A.1	P
2	Field Strength of Spurious Radiation	2.1053/27.53(h)	A.2	P
3	Frequency Stability	2.1055/27.54	A.3	P
4	Occupied Bandwidth	2.1049/27.53(h)	A.4	P
5	Emission Bandwidth	2.1049/27.53(h)	A.5	P
6	Band Edge Compliance	2.1051/27.53(h)	A.6	P
7	Conducted Spurious Emission	2.1051/27.53(h)	A.7	P
8	Peak-to-Average Power Ratio	27.50(a)/ KDB971168 D01	A.8	P



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## **7. STATEMENT**

Since the information of samples in this report is provided by the client, the laboratory is not responsible for the authenticity of sample information.

This report takes measured values as criterion of test conclusion. The test conclusion meets the limit requirements.

**8. TEST EQUIPMENTS UTILIZED**

NO.	Description	TYPE	Manufacture	series number	CAL DUE DATE
1	Test Receiver	ESR7	R&S	101676	2022-11-24
2	BiLog Antenna	3142E	ETS-Lindgren	0224831	2024-05-27
3	Horn Antenna	3117	ETS-Lindgren	00066577	2022-04-02
4	Horn Antenna	QSH-SL-18 -26-S-20	Q-par	17013	2023-01-06
5	Antenna	BBHA 9120D	Schwarzbeck	1593	2022-12-05
6	Antenna	VUBA 9117	Schwarzbeck	207	2023-07-15
7	Antenna	QWH-SL-18 -40-K-SG	Q-par	15979	2023-01-06
8	preamplifier	83017A	Agilent	MY39501110	/
9	Signal Generator	SMB100A	R&S	179725	2022-11-24
10	Fully Anechoic Chamber	FACT3-2.0	ETS-Lindgren	1285	2023-05-29
11	Spectrum Analyzer	FSV40	R&S	101192	2022-01-13
12	Universal Radio Communication Tester	CMW500	R&S	152499	2022-07-15
13	Universal Radio Communication Tester	CMW500	R&S	129146	2022-04-24
14	Spectrum Analyzer	FSU	R&S	101506	2022-12-13
15	Temperature Chamber	SH-241	ESPEC	92007516	2022-10-15
16	DC Power Supply	U3606A	Agilent Technologies	MY50450012	2022-11-13
17	Spectrum Analyzer	FSW26	R&S	102197	2022-11-24

**Test software**

Item	Name	Vesion
Radiated	EMC32	V10.50.40



**ANNEX A: MEASUREMENT RESULTS**

**A.1 OUTPUT POWER**

**Reference**

FCC: CFR Part 2.1046, 22.913, 24.232, 27.50, 90.542,90.635.

**A.1.1 Summary**

During the process of testing, the EUT was controlled via Rhode & Schwarz Digital Radio Communication tester (CMW500) to ensure max power transmission and proper modulation.

This result contains peak output power and ERP/EIRP measurements for the EUT.

In all cases, output power is within the specified limits.

**A.1.2 Conducted**

**A.1.2.1 Method of Measurements**

The EUT was set up for the max output power with pseudo random data modulation.

These measurements were done at 3 frequencies (bottom, middle and top of operational frequency range) for each bandwidth.

**A.1.2.2 Measurement result**

**LTE band 2**

Bandwidth	RB size/offset	Frequency (MHz)	Power(dBm)		
			QPSK	16QAM	64QAM
1.4MHz	1 RB high	1909.3	22.42	21.13	20.84
		1880.0	22.33	21.51	20.52
		1850.7	22.41	21.32	20.89
	1 RB low	1909.3	22.38	21.25	20.84
		1880.0	22.31	21.60	20.67
		1850.7	22.49	21.31	20.87
	50% RB mid	1909.3	22.39	21.43	20.14
		1880.0	22.50	21.48	20.64
		1850.7	22.69	21.34	20.61
	100% RB	1909.3	21.38	20.39	19.62
		1880.0	21.44	20.32	19.45
		1850.7	21.37	20.52	19.55
3MHz	1 RB high	1908.5	22.24	21.21	20.83
		1880.0	22.45	21.57	20.44
		1851.5	22.32	21.20	20.46
	1 RB low	1908.5	22.30	21.21	20.67
		1880.0	22.47	20.87	20.49
		1851.5	22.36	21.33	20.54
	50% RB mid	1908.5	21.37	20.56	19.34
		1880.0	21.42	20.48	19.62
		1851.5	21.35	20.50	19.60





	100% RB	1908.5	21.40	20.44	19.63
		1880.0	21.35	20.45	19.65
		1851.5	21.38	20.52	19.47
5MHz	1 RB high	1907.5	22.38	21.16	20.40
		1880.0	22.31	21.24	20.44
		1852.5	22.32	21.09	20.87
	1 RB low	1907.5	22.22	21.15	20.42
		1880.0	22.23	21.19	20.49
		1852.5	22.23	21.23	20.49
	50% RB mid	1907.5	21.43	20.26	19.67
		1880.0	21.40	20.41	19.49
		1852.5	21.35	20.49	19.45
	100% RB	1907.5	21.39	20.39	19.48
		1880.0	21.35	20.33	19.48
		1852.5	21.41	20.32	19.60
10MHz	1 RB high	1905.0	22.38	21.37	20.58
		1880.0	22.59	21.80	20.53
		1855.0	22.46	21.23	20.86
	1 RB low	1905.0	22.53	21.42	20.63
		1880.0	22.53	21.27	20.48
		1855.0	22.26	21.32	20.43
	50% RB mid	1905.0	21.40	20.41	19.77
		1880.0	21.38	20.40	19.77
		1855.0	21.39	20.42	19.75
	100% RB	1905.0	21.35	20.46	19.49
		1880.0	21.35	20.36	19.63
		1855.0	21.34	20.48	19.61
15MHz	1 RB high	1902.5	22.36	20.87	20.57
		1880.0	22.41	21.12	20.72
		1857.5	22.34	21.16	20.92
	1 RB low	1902.5	22.48	21.25	20.57
		1880.0	22.43	21.22	21.03
		1857.5	22.51	20.96	20.77
	50% RB mid	1902.5	21.35	20.46	19.63
		1880.0	21.37	20.37	19.71
		1857.5	21.36	20.40	19.60
	100% RB	1902.5	21.36	20.36	19.49
		1880.0	21.34	20.54	19.47
		1857.5	21.36	20.37	19.47



20MHz	1 RB high	1900.0	22.32	21.20	20.52
		1880.0	22.29	21.09	20.51
		1860.0	22.39	21.08	20.52
	1 RB low	1900.0	22.09	21.25	20.61
		1880.0	22.20	21.24	20.54
		1860.0	22.28	21.00	20.70
	50% RB mid	1900.0	21.40	20.51	19.58
		1880.0	21.34	20.44	19.68
		1860.0	21.29	20.23	19.62
	100% RB	1900.0	21.32	20.45	19.47
		1880.0	21.37	20.48	19.48
		1860.0	21.30	20.41	19.62

Note: Expanded measurement uncertainty is  $U = 0.49\text{dB}$ ,  $k = 1.96$



**LTE band 4**

Bandwidth	RB size/offset	Frequency (MHz)	Power(dBm)		
			QPSK	16QAM	64QAM
1.4MHz	1 RB high	1754.3	22.46	21.44	20.83
		1732.5	22.51	21.25	20.95
		1710.7	22.58	21.91	20.71
	1 RB low	1754.3	22.39	21.47	20.88
		1732.5	22.47	21.51	20.81
		1710.7	22.53	21.69	20.75
	50% RB mid	1754.3	22.56	21.81	20.65
		1732.5	22.48	21.81	20.65
		1710.7	22.61	21.82	20.24
	100% RB	1754.3	21.57	20.56	19.44
		1732.5	21.61	20.61	19.47
		1710.7	21.73	20.40	19.57
3MHz	1 RB high	1753.5	22.48	21.46	20.62
		1732.5	22.40	21.30	20.51
		1711.5	22.58	21.77	20.65
	1 RB low	1753.5	22.52	21.27	20.61
		1732.5	22.51	21.40	20.56
		1711.5	22.39	21.56	20.65
	50% RB mid	1753.5	21.52	20.30	19.48
		1732.5	21.58	20.54	19.67
		1711.5	21.72	20.46	19.60
	100% RB	1753.5	21.54	20.45	19.78
		1732.5	21.62	20.54	19.57
		1711.5	21.66	20.52	19.80
5MHz	1 RB high	1752.5	22.48	21.61	20.66
		1732.5	22.18	21.38	20.57
		1712.5	22.59	21.38	20.56
	1 RB low	1752.5	22.53	21.61	20.69
		1732.5	22.45	21.30	20.53
		1712.5	22.36	21.24	19.88
	50% RB mid	1752.5	21.74	20.47	19.93
		1732.5	21.65	20.57	19.82
		1712.5	21.67	20.68	19.83
	100% RB	1752.5	21.68	20.52	19.89
		1732.5	21.60	20.54	19.50
		1712.5	21.73	20.75	19.63
10MHz	1 RB high	1750.0	22.47	21.65	20.64



		1732.5	22.44	21.41	20.56	
		1715.0	22.68	21.55	20.71	
		1750.0	22.76	21.66	20.73	
	1 RB low	1732.5	22.67	21.50	20.59	
		1715.0	22.73	21.70	20.82	
		1750.0	21.70	20.62	19.93	
	50% RB mid	1732.5	21.53	20.43	19.87	
		1715.0	21.74	20.63	19.97	
		1750.0	21.75	20.70	19.70	
	100% RB	1732.5	21.61	20.53	19.77	
		1715.0	21.74	20.71	19.73	
		1747.5	22.65	21.54	20.75	
15MHz	1 RB high	1732.5	22.50	21.74	20.66	
		1717.5	22.66	21.54	20.73	
		1747.5	22.73	21.47	20.93	
	1 RB low	1732.5	22.53	21.21	20.82	
		1717.5	22.78	21.75	20.90	
		1747.5	21.72	20.65	19.85	
	50% RB mid	1732.5	21.60	20.52	19.81	
		1717.5	21.69	20.59	19.97	
		1747.5	21.77	20.58	19.65	
	100% RB	1732.5	21.55	20.53	19.66	
		1717.5	21.74	20.56	19.76	
		1745.0	22.68	21.48	20.69	
	20MHz	1 RB high	1732.5	22.74	21.50	20.56
			1720.0	22.61	21.33	20.65
			1745.0	22.90	21.60	20.81
		1 RB low	1732.5	22.79	21.60	20.74
			1720.0	22.65	21.57	20.82
			1745.0	21.75	20.69	19.75
50% RB mid		1732.5	21.62	20.44	19.60	
		1720.0	21.67	20.55	19.83	
		1745.0	21.73	20.63	19.86	
100% RB		1732.5	21.57	20.46	19.73	
		1720.0	21.68	20.56	19.81	

Note: Expanded measurement uncertainty is  $U = 0.49\text{dB}$ ,  $k = 1.96$



**LTE band 7**

Bandwidth	RB size/offset	Frequency (MHz)	Power(dBm)		
			QPSK	16QAM	64QAM
5MHz	1 RB high	2567.5	22.22	21.20	20.42
		2535.0	22.16	21.12	20.26
		2502.5	21.98	20.71	20.12
	1 RB low	2567.5	22.00	20.76	20.31
		2535.0	21.83	20.79	20.24
		2502.5	21.90	20.42	20.02
	50% RB mid	2567.5	21.39	20.47	19.45
		2535.0	21.21	20.27	19.13
		2502.5	20.93	19.80	18.94
	100% RB	2567.5	21.38	20.26	19.50
		2535.0	21.23	20.14	19.23
		2502.5	20.94	20.08	18.88
10MHz	1 RB high	2565.0	22.41	21.82	20.58
		2535.0	22.23	21.14	20.35
		2505.0	21.98	20.88	20.02
	1 RB low	2565.0	22.32	21.26	20.43
		2535.0	22.06	21.13	20.22
		2505.0	21.86	20.70	20.02
	50% RB mid	2565.0	21.42	20.48	19.77
		2535.0	21.18	20.37	19.19
		2505.0	20.95	20.02	19.31
	100% RB	2565.0	21.38	20.48	19.51
		2535.0	21.24	20.35	19.36
		2505.0	21.02	20.01	19.05
15MHz	1 RB high	2562.5	22.47	21.23	20.84
		2535.0	22.14	21.18	20.51
		2507.5	21.91	20.90	20.28
	1 RB low	2562.5	22.20	21.10	20.61
		2535.0	22.12	21.01	20.51
		2507.5	20.77	20.87	20.26
	50% RB mid	2562.5	21.44	20.43	19.65
		2535.0	21.20	20.27	19.51
		2507.5	21.04	20.09	19.30
	100% RB	2562.5	21.42	20.52	19.59
		2535.0	21.20	20.41	19.42
		2507.5	21.08	20.00	19.15



20MHz	1 RB high	2560.0	22.41	21.28	20.99
		2535.0	22.33	21.03	20.53
		2510.0	22.06	20.83	20.66
	1 RB low	2560.0	22.25	21.07	20.37
		2535.0	22.19	20.81	20.29
		2510.0	21.85	20.50	20.55
	50% RB mid	2560.0	21.41	20.52	19.67
		2535.0	21.26	20.29	19.46
		2510.0	21.02	20.18	19.13
	100% RB	2560.0	21.37	20.46	19.64
		2535.0	21.23	20.32	19.46
		2510.0	21.04	20.07	19.06

Note: Expanded measurement uncertainty is  $U = 0.49\text{dB}$ ,  $k = 1.96$



**LTE band 12**

Bandwidth	RB size/offset	Frequency (MHz)	Power(dBm)		
			QPSK	16QAM	64QAM
1.4MHz	1 RB high	715.3	23.33	22.12	21.52
		707.5	23.35	22.44	21.49
		699.7	23.48	22.45	21.98
	1 RB low	715.3	23.37	22.24	21.82
		707.5	23.48	22.24	21.84
		699.7	23.23	22.09	21.85
	50% RB mid	715.3	23.48	22.69	21.65
		707.5	23.64	22.29	21.57
		699.7	23.52	22.44	21.69
	100% RB	715.3	22.39	21.21	20.37
		707.5	22.31	20.98	20.37
		699.7	22.55	21.32	20.44
3MHz	1 RB high	714.5	23.42	22.40	21.59
		707.5	23.40	22.18	21.58
		700.5	23.48	22.44	21.39
	1 RB low	714.5	23.37	22.40	21.98
		707.5	23.40	22.38	21.46
		700.5	23.59	22.13	21.41
	50% RB mid	714.5	22.44	21.29	20.44
		707.5	22.37	21.43	20.46
		700.5	22.41	21.58	20.54
	100% RB	714.5	22.40	21.19	20.60
		707.5	22.37	21.38	20.59
		700.5	22.48	21.10	20.44
5MHz	1 RB high	713.5	23.38	22.27	21.39
		707.5	23.34	22.27	21.41
		701.5	23.39	22.34	21.54
	1 RB low	713.5	23.31	22.32	21.41
		707.5	23.04	22.21	21.43
		701.5	23.35	22.35	21.49
	50% RB mid	713.5	22.41	21.42	20.44
		707.5	22.45	21.38	20.63
		701.5	22.58	21.44	20.64
	100% RB	713.5	22.33	21.53	20.51
		707.5	22.44	21.32	20.32
		701.5	22.44	21.66	20.52
10MHz	1 RB high	711.0	23.37	22.27	21.74



		707.5	23.49	22.26	21.70
		704.0	23.40	22.12	21.48
	1 RB low	711.0	23.40	22.18	21.31
		707.5	23.46	22.16	21.27
		704.0	23.33	22.11	21.50
	50% RB mid	711.0	22.45	21.40	20.71
		707.5	22.33	21.52	20.63
		704.0	22.41	21.52	20.62
	100% RB	711.0	22.45	21.47	20.45
		707.5	22.40	21.28	20.40
		704.0	22.43	21.45	20.51

Note: Expanded measurement uncertainty is  $U = 0.49\text{dB}$ ,  $k = 1.96$





**LTE band 26(814MHz-824MHz)**

Bandwidth	RB size/offset	Frequency (MHz)	Power(dBm)		
			QPSK	16QAM	64QAM
1.4MHz	1 RB high	823.3	22.95	21.76	21.05
		819.0	22.82	22.18	21.33
		814.7	23.36	22.04	21.12
	1 RB low	823.3	22.99	21.84	21.16
		819.0	22.93	22.20	21.39
		814.7	22.99	21.89	21.15
	50% RB mid	823.3	23.18	21.74	21.13
		819.0	23.13	22.07	21.12
		814.7	23.16	22.06	20.71
	100% RB	823.3	21.93	21.10	19.87
		819.0	22.00	20.99	20.00
		814.7	22.14	21.03	20.12
3MHz	1 RB high	822.5	22.76	21.92	21.33
		819.0	22.93	22.07	21.50
		815.5	23.07	22.14	21.46
	1 RB low	822.5	22.68	21.95	21.08
		819.0	22.87	22.08	21.14
		815.5	22.94	22.12	21.18
	50% RB mid	822.5	21.91	20.82	19.72
		819.0	22.06	20.87	20.17
		815.5	22.11	21.24	20.18
	100% RB	822.5	21.95	21.16	20.07
		819.0	22.05	21.27	20.18
		815.5	22.19	21.24	20.33
5MHz	1 RB high	821.5	22.85	21.83	21.23
		819.0	22.94	21.98	21.05
		816.5	23.08	21.79	20.96
	1 RB low	821.5	22.83	21.91	20.89
		819.0	22.84	21.75	21.01
		816.5	23.06	21.93	20.34
	50% RB mid	821.5	21.91	21.03	20.04
		819.0	22.00	21.01	20.25
		816.5	22.16	21.12	20.34
	100% RB	821.5	21.91	20.88	20.18
		819.0	22.01	21.04	20.02
		816.5	22.14	21.16	20.00
10MHz	1 RB high	819.0	22.93	21.93	21.33



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	1 RB low	819.0	23.16	22.14	21.53
	50% RB mid	819.0	23.32	22.39	21.61
	100% RB	819.0	22.90	21.97	21.04

Note: Expanded measurement uncertainty is  $U = 0.49\text{dB}$ ,  $k = 1.96$



**LTE band 26(824MHz-849MHz)**

Bandwidth	RB size/offset	Frequency (MHz)	Power(dBm)		
			QPSK	16QAM	64QAM
1.4MHz	1 RB high	848.3	22.99	21.84	21.55
		836.5	23.13	21.92	21.52
		824.7	23.23	22.13	21.53
	1 RB low	848.3	23.02	21.82	21.49
		836.5	23.07	21.94	21.17
		824.7	23.19	21.83	21.59
	50% RB mid	848.3	23.10	22.09	21.18
		836.5	23.26	22.17	21.23
		824.7	23.31	22.31	21.41
	100% RB	848.3	22.05	20.79	20.10
		836.5	22.13	21.04	19.91
		824.7	22.25	21.22	20.29
3MHz	1 RB high	847.5	23.16	21.95	21.43
		836.5	23.06	22.18	21.24
		825.5	23.22	22.10	21.73
	1 RB low	847.5	23.18	22.02	20.70
		836.5	23.18	21.91	21.28
		825.5	23.42	22.08	21.02
	50% RB mid	847.5	22.03	21.07	20.13
		836.5	22.18	21.18	20.35
		825.5	22.25	21.22	20.35
	100% RB	847.5	22.02	21.06	20.05
		836.5	22.18	20.96	20.46
		825.5	22.34	21.36	20.45
5MHz	1 RB high	846.5	23.06	21.88	21.02
		836.5	23.04	21.98	21.49
		826.5	23.25	21.97	21.17
	1 RB low	846.5	22.96	21.99	21.11
		836.5	22.90	22.04	21.06
		826.5	23.10	22.17	21.22
	50% RB mid	846.5	21.97	21.12	19.94
		836.5	22.10	21.09	20.24
		826.5	22.24	21.36	20.57
	100% RB	846.5	22.02	21.09	20.06
		836.5	22.16	21.09	20.42
		826.5	22.24	21.46	20.13
10MHz	1 RB high	844.0	23.15	21.99	21.31



		836.5	23.29	22.15	21.40
		829.0	23.33	22.13	21.53
		844.0	22.08	21.20	20.21
	1 RB low	836.5	22.12	21.47	20.46
		829.0	22.25	21.30	20.33
		844.0	22.04	21.27	20.01
	50% RB mid	836.5	22.20	21.42	20.18
		829.0	22.21	21.26	20.65
		844.0	22.03	21.07	20.20
	100% RB	836.5	22.11	21.15	20.29
		829.0	22.25	21.31	20.42
		841.5	23.24	21.90	21.32
15MHz	1 RB high	836.5	23.20	21.94	21.36
		831.5	23.28	22.06	21.28
		841.5	23.20	21.97	21.29
	1 RB low	836.5	23.12	21.94	21.56
		831.5	23.25	22.03	21.58
		841.5	22.16	21.06	20.38
	50% RB mid	836.5	22.19	21.23	20.33
		831.5	22.25	21.31	20.43
		841.5	22.05	21.07	20.33
	100% RB	836.5	22.15	21.18	20.22
		831.5	22.27	21.22	20.32

Note: Expanded measurement uncertainty is  $U = 0.49\text{dB}$ ,  $k = 1.96$



**LTE band 41**

Bandwidth	RB size/offset	Frequency (MHz)	Power(dBm)		
			QPSK	16QAM	64QAM
5MHz	1 RB high	2537.50	22.87	21.37	20.23
		2595.00	22.73	21.70	20.01
		2652.50	22.20	21.32	19.43
	1 RB low	2537.50	22.70	21.23	20.23
		2595.00	22.51	21.05	20.03
		2652.50	22.21	21.15	19.30
	50% RB mid	2537.50	21.94	21.06	19.91
		2595.00	21.81	20.80	19.69
		2652.50	21.35	20.31	19.25
	100% RB	2537.50	21.94	21.18	19.72
		2595.00	21.72	20.83	19.76
		2652.50	21.32	20.67	19.28
10MHz	1 RB high	2540.00	22.93	20.77	20.26
		2595.00	22.71	21.79	20.09
		2650.00	22.48	21.37	19.69
	1 RB low	2540.00	22.89	20.86	20.36
		2595.00	22.75	21.74	20.15
		2650.00	22.21	21.06	19.72
	50% RB mid	2540.00	22.05	21.20	19.86
		2595.00	21.80	20.71	19.97
		2650.00	21.41	20.41	19.23
	100% RB	2540.00	21.93	20.98	19.93
		2595.00	21.77	20.80	19.79
		2650.00	21.40	20.42	19.37
15MHz	1 RB high	2542.50	23.02	21.48	20.34
		2595.00	22.78	21.76	20.15
		2647.50	22.50	21.25	19.61
	1 RB low	2542.50	22.92	20.95	20.40
		2595.00	22.73	21.61	20.11
		2647.50	22.38	21.24	19.78
	50% RB mid	2542.50	22.06	20.83	19.91
		2595.00	21.79	20.69	19.69
		2647.50	21.46	20.32	19.32
	100% RB	2542.50	21.96	21.00	19.81
		2595.00	21.79	20.83	19.68
		2647.50	21.61	20.36	19.41



20MHz	1 RB high	2545.00	22.84	21.33	20.27
		2595.00	22.72	21.24	20.24
		2645.00	22.33	21.45	19.98
	1 RB low	2545.00	22.88	21.39	20.36
		2595.00	22.70	21.20	20.10
		2645.00	22.32	20.35	19.71
	50% RB mid	2545.00	21.92	20.98	19.97
		2595.00	21.84	20.68	19.79
		2645.00	21.47	20.29	19.35
	100% RB	2545.00	22.02	20.96	20.00
		2595.00	21.92	20.69	19.90
		2645.00	21.52	20.42	19.31

Note: Expanded measurement uncertainty is  $U = 0.49\text{dB}$ ,  $k = 1.96$



**LTE band 66**

Bandwidth	RB size/offset	Frequency (MHz)	Power(dBm)		
			QPSK	16QAM	64QAM
1.4MHz	1 RB high	1779.3	22.50	21.57	20.59
		1745.0	22.48	21.37	20.98
		1710.7	22.44	21.28	20.79
	1 RB low	1779.3	22.48	21.16	20.87
		1745.0	22.45	21.36	20.87
		1710.7	22.40	21.28	20.50
	50% RB mid	1779.3	22.61	21.87	20.68
		1745.0	22.54	21.65	20.11
		1710.7	22.48	21.45	20.57
	100% RB	1779.3	21.63	20.63	19.65
		1745.0	21.71	19.97	19.51
		1710.7	21.43	20.15	19.44
3MHz	1 RB high	1778.5	22.47	21.44	20.60
		1745.0	22.44	21.57	20.88
		1711.5	22.45	21.93	20.48
	1 RB low	1778.5	22.56	21.66	20.66
		1745.0	22.68	21.58	20.70
		1711.5	22.48	21.35	20.48
	50% RB mid	1778.5	21.77	20.54	19.66
		1745.0	21.58	20.67	19.67
		1711.5	21.45	20.26	19.29
	100% RB	1778.5	21.59	20.54	19.53
		1745.0	21.51	20.46	19.54
		1711.5	21.39	20.12	19.57
5MHz	1 RB high	1777.5	22.16	21.42	20.51
		1745.0	22.48	21.40	20.87
		1712.5	22.15	21.46	20.25
	1 RB low	1777.5	22.59	21.55	20.58
		1745.0	22.27	21.46	20.47
		1712.5	22.20	21.29	20.34
	50% RB mid	1777.5	21.61	20.54	19.67
		1745.0	21.55	20.31	19.72
		1712.5	21.49	20.42	19.37
	100% RB	1777.5	21.65	20.39	19.80
		1745.0	21.59	20.63	19.53
		1712.5	21.46	20.49	19.19
10MHz	1 RB high	1775.0	22.35	21.35	20.56



		1745.0	22.59	21.41	20.86	
		1715.0	22.33	21.29	20.29	
		1775.0	22.63	21.31	21.04	
	1 RB low	1745.0	22.63	21.52	20.46	
		1715.0	22.46	21.27	20.32	
		1775.0	21.54	20.38	19.68	
	50% RB mid	1745.0	21.61	20.63	19.56	
		1715.0	21.46	20.37	19.39	
		1775.0	21.63	20.62	19.62	
	100% RB	1745.0	21.57	20.61	19.61	
		1715.0	21.49	20.52	19.43	
		1772.5	22.51	21.73	20.44	
15MHz	1 RB high	1745.0	22.32	21.31	20.86	
		1717.5	22.38	21.05	20.84	
		1772.5	22.57	21.46	20.54	
	1 RB low	1745.0	22.56	21.40	20.61	
		1717.5	22.61	21.26	20.67	
		1772.5	21.54	20.45	19.60	
	50% RB mid	1745.0	21.58	20.42	19.66	
		1717.5	21.42	20.34	19.47	
		1772.5	21.53	20.46	19.66	
	100% RB	1745.0	21.52	20.56	19.48	
		1717.5	21.37	20.30	19.28	
		1770.0	22.57	21.82	20.88	
	20MHz	1 RB high	1745.0	22.45	21.34	20.57
			1720.0	22.21	21.18	20.21
			1770.0	22.65	21.57	20.65
		1 RB low	1745.0	22.47	21.34	20.61
			1720.0	22.36	21.38	20.73
			1770.0	21.57	20.46	19.51
50% RB mid		1745.0	21.54	20.50	19.59	
		1720.0	21.35	20.31	19.54	
		1770.0	21.60	20.54	19.54	
100% RB		1745.0	21.50	20.54	19.65	
		1720.0	21.36	20.29	19.67	

Note: Expanded measurement uncertainty is  $U = 0.49\text{dB}$ ,  $k = 1.96$



### A.1.3 Radiated

#### A.1.3.1 Description

This is the test for the maximum radiated power from the EUT.

Rule Part 24.232(b) specifies, "Mobile/portable stations are limited to 2 watts e.i.r.p. Peak power" and 24.232(c) specifies that "Peak transmit power must be measured over any interval of continuous transmission using instrumentation calibrated in terms of an rms-equivalent voltage."

Rule Part 27.50(d) specifies "Fixed, mobile, and portable (handheld) stations operating in the 1710–1755 MHz band are limited to 1 watt EIRP".

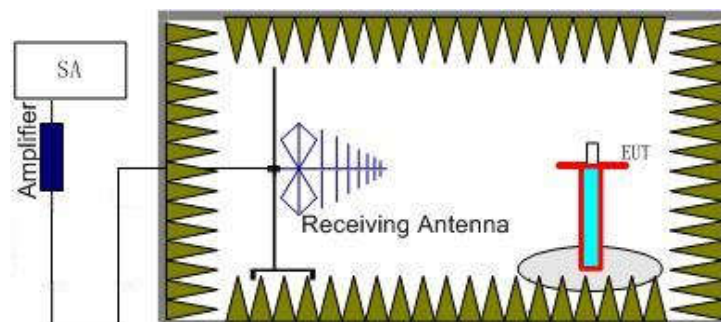
Rule Part 27.50(h)(2) specifies "Mobile stations are limited to 2.0 watts EIRP".

Rule Part 27.50(c) specifies "Portable stations (hand-held de-vices) are limited to 3 watts ERP".

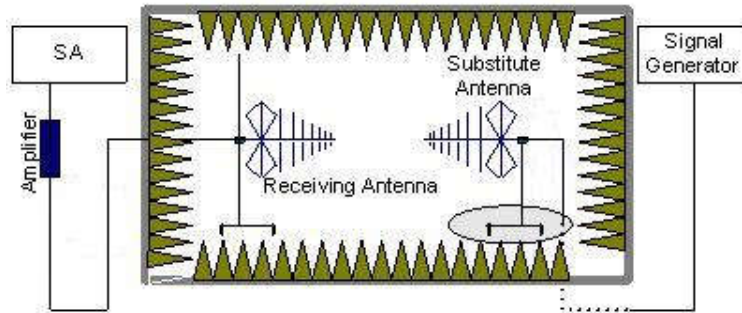
Rule Part 27.50(a)(3) specifies "For mobile and portable stations transmitting in the 2305–2315 MHz band or the 2350–2360 MHz band, the average EIRP must not exceed 50 milliwatts within any 1 megahertz of authorized bandwidth, except that for mobile and portable stations compliant with 3GPP LTE standards or another advanced mobile broadband protocol that avoids concentrating energy at the edge of the operating band the average EIRP must not exceed 250 milliwatts within any 5 megahertz of authorized bandwidth but may exceed 50 milliwatts within any 1 megahertz of authorized bandwidth." Rule Part 90.635(b) specifies "The maximum output power of the transmitter for mobile stations is 100 watts (20 dBw)."

#### A.1.3.2 Method of Measurement

1. For radiated emissions measurements performed at frequencies less than or equal to 1 GHz, EUT was placed on a 80 cm high non-conductive stand at a 3 meter test distance from the receive antenna. For radiated measurements performed at frequencies above 1 GHz, EUT was placed on a 1.5 meter high non-conductive stand at a 3 meter test distance from the receive antenna. Receiving antenna was placed on the antenna mast 3 meters from the EUT. For emission measurements. The receiving antenna shall be varied from 1 m to 4 m in height above the reference ground in a search for the relative positioning that produces the maximum radiated signal level. The test setup refers to figure below. Detected emissions were maximized at each frequency by rotating the EUT through 360° and adjusting the receiving antenna polarization. The radiated emission measurements of all transmit frequencies in three channels (High, Middle, Low) were measured with peak detector.



2. The EUT is then put into continuously transmitting mode at its maximum power level during the test. And the maximum value of the receiver should be recorded as (Pr).
3. The EUT shall be replaced by a substitution antenna. The test setup refers to figure below.



In the chamber, a substitution antenna for the frequency band of interest is placed at the reference point of the chamber. An RF signal source for the frequency band of interest is connected to the substitution antenna with a cable that has been constructed to not interfere with the radiation pattern of the antenna. A power ( $P_{Mea}$ ) is applied to the input of the substitution antenna and adjusts the level of the signal generator output until the value of the receiver reaches the previously recorded ( $P_r$ ). The power of signal source ( $P_{Mea}$ ) is recorded. The test should be performed by rotating the test item and adjusting the receiving antenna polarization.

4. An amplifier should be connected to the Signal Source output port. And the cable should be connected between the amplifier and the substitution antenna.

The cable loss ( $P_{cl}$ ), the substitution Antenna Gain(dBi) ( $G_a$ ) and the amplifier Gain ( $P_{Ag}$ ) should be recorded after test.

The measurement results are obtained as described below:

$$\text{Power (EIRP)} = P_{Mea} - P_{Ag} - P_{cl} + G_a$$

5. This value is EIRP since the measurement is calibrated using an antenna of known gain (unit dBi) and known input power.
6. ERP can be calculated from EIRP by subtracting the gain of the dipole,  $ERP = EIRP - 2.15dB$ .



**A.1.3.3 Measurement result**

**Upper antenna**

**LTE Band 2- EIRP Part 24. 232(b)**

Limits: ≤33dBm (2W)

**LTE Band 2\_1.4MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1850.70	-15.92	-29.30	8.10	21.48	33.00	H
1880.00	-15.87	-29.40	8.10	21.63	33.00	H
1909.30	-15.67	-29.30	8.10	21.73	33.00	H

**LTE Band 2\_3MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1851.50	-15.67	-29.30	8.10	21.73	33.00	H
1880.00	-15.59	-29.40	8.10	21.92	33.00	H
<b>1908.50</b>	<b>-15.45</b>	<b>-29.30</b>	<b>8.10</b>	<b>21.95</b>	<b>33.00</b>	<b>H</b>

**LTE Band 2\_5MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1852.50	-16.03	-29.30	8.10	21.37	33.00	H
1880.00	-15.60	-29.40	8.10	21.90	33.00	H
1907.50	-15.88	-29.30	8.10	21.52	33.00	H

**LTE Band 2\_10MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1855.00	-15.90	-29.30	8.10	21.50	33.00	H
1880.00	-15.67	-29.40	8.10	21.83	33.00	H
1905.00	-15.49	-29.30	8.10	21.92	33.00	H

**LTE Band 2\_15MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1857.50	-15.77	-29.30	8.10	21.63	33.00	H
1880.00	-15.62	-29.40	8.10	21.88	33.00	H
1902.50	-15.60	-29.30	8.10	21.80	33.00	H

**LTE Band 2\_20 MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1860.00	-15.69	-29.30	8.10	21.71	33.00	H
1880.00	-15.90	-29.40	8.10	21.60	33.00	H
1900.00	-15.60	-29.30	8.10	21.80	33.00	H



**LTE Band 2\_1.4MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1850.70	-16.75	-29.30	8.10	20.65	33.00	H
1880.00	-17.01	-29.40	8.10	20.50	33.00	H
1909.30	-16.79	-29.30	8.10	20.61	33.00	H

**LTE Band 2\_3MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1851.50	-16.81	-29.30	8.10	20.59	33.00	H
1880.00	-16.94	-29.40	8.10	20.56	33.00	H
1908.50	-16.73	-29.30	8.10	20.67	33.00	H

**LTE Band 2\_5MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1852.50	-16.83	-29.30	8.10	20.57	33.00	H
1880.00	-16.97	-29.40	8.10	20.53	33.00	H
1907.50	-16.88	-29.30	8.10	20.52	33.00	H

**LTE Band 2\_10MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1855.00	-16.82	-29.30	8.10	20.58	33.00	H
1880.00	-17.01	-29.40	8.10	20.49	33.00	H
1905.00	-16.93	-29.30	8.10	20.47	33.00	H

**LTE Band 2\_15MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1857.50	-16.87	-29.30	8.10	20.54	33.00	H
1880.00	-17.06	-29.40	8.10	20.44	33.00	H
1902.50	-16.92	-29.30	8.10	20.48	33.00	H

**LTE Band 2\_20 MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1860.00	-17.02	-29.30	8.10	20.38	33.00	H
1880.00	-17.16	-29.40	8.10	20.34	33.00	H
1900.00	-17.03	-29.30	8.10	20.38	33.00	H



**LTE Band 2\_1.4MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1850.70	-17.37	-29.30	8.10	20.03	33.00	H
1880.00	-17.68	-29.40	8.10	19.82	33.00	H
1909.30	-17.70	-29.30	8.10	19.70	33.00	H

**LTE Band 2\_3MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1851.50	-17.49	-29.30	8.10	19.91	33.00	H
1880.00	-18.01	-29.40	8.10	19.49	33.00	H
1908.50	-17.91	-29.30	8.10	19.50	33.00	H

**LTE Band 2\_5MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1852.50	-17.50	-29.30	8.10	19.90	33.00	H
1880.00	-17.81	-29.40	8.10	19.69	33.00	H
1907.50	-17.65	-29.30	8.10	19.75	33.00	H

**LTE Band 2\_10MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1855.00	-17.60	-29.30	8.10	19.80	33.00	H
1880.00	-17.94	-29.40	8.10	19.56	33.00	H
1905.00	-17.74	-29.30	8.10	19.66	33.00	H

**LTE Band 2\_15MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1857.50	-17.68	-29.30	8.10	19.72	33.00	H
1880.00	-17.92	-29.40	8.10	19.58	33.00	H
1902.50	-17.75	-29.30	8.10	19.65	33.00	H

**LTE Band 2\_20 MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1860.00	-17.82	-29.30	8.10	19.58	33.00	H
1880.00	-18.01	-29.40	8.10	19.49	33.00	H
1900.00	-17.88	-29.30	8.10	19.52	33.00	H

Peak EIRP (dBm)=P<sub>Mea</sub>(-15.45dBm)-(P<sub>cl</sub>+P<sub>Ag</sub>)(-29.30dB)+G<sub>a</sub>(8.10dB) =21.95dBm



**LTE Band 4- EIRP Part 27.50(d)**

Limits: ≤30dBm (1W)

**LTE Band 4\_1.4MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1710.70	-15.85	-29.60	8.10	21.85	30.00	H
1732.50	-15.95	-29.60	8.10	21.75	30.00	H
1754.30	-15.67	-29.50	8.10	21.93	30.00	H

**LTE Band 4\_3MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
<b>1711.50</b>	<b>-15.74</b>	<b>-29.60</b>	<b>8.10</b>	<b>21.96</b>	<b>30.00</b>	<b>H</b>
1732.50	-16.04	-29.60	8.10	21.67	30.00	H
1753.50	-15.71	-29.50	8.10	21.90	30.00	H

**LTE Band 4\_5MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1712.50	-15.88	-29.60	8.10	21.82	30.00	H
1732.50	-16.12	-29.60	8.10	21.59	30.00	H
1752.50	-15.95	-29.50	8.10	21.65	30.00	H

**LTE Band 4\_10MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1715.00	-15.95	-29.60	8.10	21.75	30.00	H
1732.50	-16.11	-29.60	8.10	21.59	30.00	H
1750.00	-15.92	-29.50	8.10	21.68	30.00	H

**LTE Band 4\_15MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1717.50	-15.99	-29.60	8.10	21.71	30.00	H
1732.50	-16.14	-29.60	8.10	21.56	30.00	H
1747.50	-15.96	-29.50	8.10	21.64	30.00	H

**LTE Band 4\_20MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1720.00	-16.12	-29.60	8.10	21.58	30.00	H
1732.50	-16.24	-29.60	8.10	21.46	30.00	H
1745.00	-16.03	-29.50	8.10	21.57	30.00	H



**LTE Band 4\_1.4MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1710.70	-17.21	-29.60	8.10	20.50	30.00	H
1732.50	-17.14	-29.60	8.10	20.56	30.00	H
1754.30	-17.14	-29.50	8.10	20.46	30.00	H

**LTE Band 4\_3MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1711.50	-17.11	-29.60	8.10	20.59	30.00	H
1732.50	-17.07	-29.60	8.10	20.63	30.00	H
1753.50	-17.14	-29.50	8.10	20.46	30.00	H

**LTE Band 4\_5MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1712.50	-17.14	-29.60	8.10	20.57	30.00	H
1732.50	-17.23	-29.60	8.10	20.47	30.00	H
1752.50	-17.11	-29.50	8.10	20.49	30.00	H

**LTE Band 4\_10MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1715.00	-17.25	-29.60	8.10	20.45	30.00	H
1732.50	-17.11	-29.60	8.10	20.59	30.00	H
1750.00	-17.14	-29.50	8.10	20.46	30.00	H

**LTE Band 4\_15MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1717.50	-17.14	-29.60	8.10	20.56	30.00	H
1732.50	-17.06	-29.60	8.10	20.64	30.00	H
1747.50	-17.04	-29.50	8.10	20.56	30.00	H

**LTE Band 4\_20MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1720.00	-17.32	-29.60	8.10	20.38	30.00	H
1732.50	-17.23	-29.60	8.10	20.47	30.00	H
1745.00	-17.21	-29.50	8.10	20.40	30.00	H



**LTE Band 4\_1.4MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1710.70	-18.04	-29.60	8.10	19.66	30.00	H
1732.50	-17.68	-29.60	8.10	20.03	30.00	H
1754.30	-17.78	-29.50	8.10	19.82	30.00	H

**LTE Band 4\_3MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1711.50	-17.90	-29.60	8.10	19.81	30.00	H
1732.50	-17.79	-29.60	8.10	19.91	30.00	H
1753.50	-17.74	-29.50	8.10	19.86	30.00	H

**LTE Band 4\_5MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1712.50	-17.91	-29.60	8.10	19.80	30.00	H
1732.50	-17.98	-29.60	8.10	19.72	30.00	H
1752.50	-17.86	-29.50	8.10	19.74	30.00	H

**LTE Band 4\_10MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1715.00	-18.01	-29.60	8.10	19.69	30.00	H
1732.50	-17.88	-29.60	8.10	19.82	30.00	H
1750.00	-17.88	-29.50	8.10	19.72	30.00	H

**LTE Band 4\_15MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1717.50	-18.10	-29.60	8.10	19.60	30.00	H
1732.50	-17.90	-29.60	8.10	19.80	30.00	H
1747.50	-17.96	-29.50	8.10	19.64	30.00	H

**LTE Band 4\_20MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1720.00	-18.07	-29.60	8.10	19.63	30.00	H
1732.50	-17.82	-29.60	8.10	19.88	30.00	H
1745.00	-17.98	-29.50	8.10	19.62	30.00	H

Peak EIRP (dBm)=P<sub>Mea</sub>(-15.74dBm)-(P<sub>ci</sub>+P<sub>Ag</sub>)(-29.60dB)+G<sub>a</sub>(8.10dB) =21.96dBm





**LTE Band 7- EIRP Part 27.50(h)(2)**

**Limits:** ≤33 dBm (2W)

**LTE Band 7\_5MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	G <sub>a</sub> Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2502.50	-17.91	-28.70	10.70	21.49	33.00	H
2535.00	-18.01	-28.60	10.70	21.29	33.00	H
2567.50	-17.86	-28.60	10.70	21.44	33.00	H

**LTE Band 7\_10MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	G <sub>a</sub> Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2505.00	-17.94	-28.70	10.70	21.46	33.00	H
2535.00	-17.94	-28.60	10.70	21.36	33.00	H
2565.00	-17.85	-28.60	10.70	21.45	33.00	H

**LTE Band 7\_15MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	G <sub>a</sub> Antenna Gain(dB)	EIRP(dBm)	Limit(dBm)	Polarization
2507.50	-17.87	-28.70	10.70	21.53	33.00	H
2535.00	-17.72	-28.60	10.70	21.58	33.00	H
2562.50	-17.85	-28.60	10.70	21.45	33.00	H

**LTE Band 7\_20MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	G <sub>a</sub> Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2510.00	-17.93	-28.70	10.70	21.47	33.00	H
<b>2535.00</b>	<b>-17.71</b>	<b>-28.60</b>	<b>10.70</b>	<b>21.59</b>	<b>33.00</b>	<b>H</b>
2560.00	-17.92	-28.60	10.70	21.38	33.00	H



**LTE Band 7\_5MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	G <sub>a</sub> Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2502.50	-18.84	-28.70	10.70	20.57	33.00	H
2535.00	-18.70	-28.60	10.70	20.60	33.00	H
2567.50	-18.83	-28.60	10.70	20.47	33.00	H

**LTE Band 7\_10MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	G <sub>a</sub> Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2505.00	-18.88	-28.70	10.70	20.53	33.00	H
2535.00	-18.81	-28.60	10.70	20.49	33.00	H
2565.00	-18.74	-28.60	10.70	20.56	33.00	H

**LTE Band 7\_15MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	G <sub>a</sub> Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2507.50	-18.82	-28.70	10.70	20.58	33.00	H
2535.00	-18.73	-28.60	10.70	20.57	33.00	H
2562.50	-18.83	-28.60	10.70	20.47	33.00	H

**LTE Band 7\_20MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	G <sub>a</sub> Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2510.00	-18.97	-28.70	10.70	20.43	33.00	H
2535.00	-18.92	-28.60	10.70	20.38	33.00	H
2560.00	-18.94	-28.60	10.70	20.36	33.00	H



**LTE Band 7\_5MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	G <sub>a</sub> Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2502.50	-19.49	-28.70	10.70	19.91	33.00	H
2535.00	-19.46	-28.60	10.70	19.84	33.00	H
2567.50	-19.70	-28.60	10.70	19.60	33.00	H

**LTE Band 7\_10MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	G <sub>a</sub> Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2505.00	-19.80	-28.70	10.70	19.60	33.00	H
2535.00	-19.60	-28.60	10.70	19.70	33.00	H
2565.00	-19.81	-28.60	10.70	19.50	33.00	H

**LTE Band 7\_15MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	G <sub>a</sub> Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2507.50	-19.91	-28.70	10.70	19.49	33.00	H
2535.00	-19.69	-28.60	10.70	19.61	33.00	H
2562.50	-19.71	-28.60	10.70	19.59	33.00	H

**LTE Band 7\_20MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	G <sub>a</sub> Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2510.00	-19.72	-28.70	10.70	19.68	33.00	H
2535.00	-19.65	-28.60	10.70	19.65	33.00	H
2560.00	-19.80	-28.60	10.70	19.50	33.00	H

Peak EIRP (dBm)=P<sub>Mea</sub>(-17.71dBm)-(P<sub>cl</sub>+P<sub>Ag</sub>)(-28.60dB)+G<sub>a</sub>(10.70dB) =21.59dBm



**LTE Band 12 - ERP Part 27.50(c)(10)**

Limits: ≤34.77dBm (3W)

**LTE Band 12\_1.4MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
699.70	-10.38	-34.80	-0.93	2.15	21.34	34.77	V
<b>707.50</b>	<b>-10.23</b>	<b>-34.70</b>	<b>-0.91</b>	<b>2.15</b>	<b>21.41</b>	<b>34.77</b>	<b>V</b>
715.30	-10.66	-34.70	-0.68	2.15	21.20	34.77	V

**LTE Band 12\_3MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
700.50	-10.36	-34.80	-0.97	2.15	21.32	34.77	V
707.50	-10.25	-34.70	-0.91	2.15	21.40	34.77	V
714.50	-10.60	-34.70	-0.64	2.15	21.31	34.77	V

**LTE Band 12\_5MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
701.50	-10.47	-34.80	-0.97	2.15	21.21	34.77	V
707.50	-10.32	-34.70	-0.91	2.15	21.32	34.77	V
713.50	-10.61	-34.70	-0.64	2.15	21.30	34.77	V

**LTE Band 12\_10MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
704.00	-10.43	-34.80	-0.97	2.15	21.26	34.77	V
707.50	-10.51	-34.70	-0.91	2.15	21.13	34.77	V
711.00	-10.63	-34.70	-0.64	2.15	21.28	34.77	V



**LTE Band 12\_1.4MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
699.70	-10.79	-34.80	-0.93	2.15	20.93	34.77	V
707.50	-10.77	-34.70	-0.91	2.15	20.87	34.77	V
715.30	-11.22	-34.70	-0.68	2.15	20.65	34.77	V

**LTE Band 12\_3MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
700.50	-10.84	-34.80	-0.97	2.15	20.85	34.77	V
707.50	-10.91	-34.70	-0.91	2.15	20.73	34.77	V
714.50	-11.27	-34.70	-0.64	2.15	20.63	34.77	V

**LTE Band 12\_5MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
701.50	-11.13	-34.80	-0.97	2.15	20.55	34.77	V
707.50	-10.99	-34.70	-0.91	2.15	20.65	34.77	V
713.50	-11.33	-34.70	-0.64	2.15	20.57	34.77	V

**LTE Band 12\_10MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
704.00	-11.04	-34.80	-0.97	2.15	20.64	34.77	V
707.50	-11.19	-34.70	-0.91	2.15	20.46	34.77	V
711.00	-11.34	-34.70	-0.64	2.15	20.57	34.77	V



**LTE Band 12\_1.4MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
699.70	-11.41	-34.80	-0.93	2.15	20.31	34.77	V
707.50	-11.37	-34.70	-0.91	2.15	20.27	34.77	V
715.30	-11.53	-34.70	-0.68	2.15	20.34	34.77	V

**LTE Band 12\_3MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
700.50	-11.42	-34.80	-0.97	2.15	20.26	34.77	V
707.50	-11.32	-34.70	-0.91	2.15	20.32	34.77	V
714.50	-11.47	-34.70	-0.64	2.15	20.43	34.77	V

**LTE Band 12\_5MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
701.50	-11.34	-34.80	-0.97	2.15	20.34	34.77	V
707.50	-11.41	-34.70	-0.91	2.15	20.23	34.77	V
713.50	-11.57	-34.70	-0.64	2.15	20.33	34.77	V

**LTE Band 12\_10MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
704.00	-11.47	-34.80	-0.97	2.15	20.22	34.77	V
707.50	-11.31	-34.70	-0.91	2.15	20.33	34.77	V
711.00	-11.51	-34.70	-0.64	2.15	20.39	34.77	V

Peak ERP (dBm)=P<sub>Mea</sub>(-10.23Bm)-(P<sub>cl</sub>+P<sub>Ag</sub>)(-34.70dB)+G<sub>a</sub>(-0.91dB) -2.15dB =21.41dBm



**LTE band 26(814MHz-824MHz)- ERP Part 90.635(b)**

**Limits:** ≤50.00dBm (100W)

**LTE band 26(814MHz-824MHz)\_1.4MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
814.70	-9.53	-33.70	-0.80	2.15	21.22	50.00	H
819.00	-9.57	-33.60	-0.75	2.15	21.13	50.00	H
823.30	-9.42	-33.60	-0.79	2.15	21.23	50.00	H

**LTE band 26(814MHz-824MHz)\_3MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
815.50	-9.54	-33.70	-0.80	2.15	21.21	50.00	H
819.00	-9.58	-33.60	-0.75	2.15	21.13	50.00	H
822.50	-9.42	-33.60	-0.79	2.15	21.23	50.00	H

**LTE band 26(814MHz-824MHz)\_5MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
<b>816.50</b>	<b>-9.41</b>	<b>-33.70</b>	<b>-0.80</b>	<b>2.15</b>	<b>21.34</b>	<b>50.00</b>	<b>H</b>
819.00	-9.38	-33.60	-0.75	2.15	21.32	50.00	H
821.50	-9.45	-33.60	-0.79	2.15	21.21	50.00	H

**LTE band 26(814MHz-824MHz)\_10MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
819.00	-9.63	-33.60	-0.80	2.15	21.02	50.00	H
819.00	-9.42	-33.60	-0.75	2.15	21.29	50.00	H
819.00	-9.50	-33.60	-0.79	2.15	21.16	50.00	H



**LTE band 26(814MHz-824MHz)\_1.4MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
814.70	-10.09	-33.70	-0.80	2.15	20.66	50.00	H
819.00	-10.16	-33.60	-0.75	2.15	20.54	50.00	H
823.30	-10.12	-33.60	-0.79	2.15	20.53	50.00	H

**LTE band 26(814MHz-824MHz)\_3MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
815.50	-10.41	-33.70	-0.80	2.15	20.34	50.00	H
819.00	-10.25	-33.60	-0.75	2.15	20.46	50.00	H
822.50	-9.98	-33.60	-0.79	2.15	20.68	50.00	H

**LTE band 26(814MHz-824MHz)\_5MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
816.50	-10.18	-33.70	-0.80	2.15	20.57	50.00	H
819.00	-10.24	-33.60	-0.75	2.15	20.47	50.00	H
821.50	-10.12	-33.60	-0.79	2.15	20.53	50.00	H

**LTE band 26(814MHz-824MHz)\_10MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
819.00	-10.30	-33.60	-0.80	2.15	20.35	50.00	H
819.00	-10.24	-33.60	-0.75	2.15	20.47	50.00	H
819.00	-10.31	-33.60	-0.79	2.15	20.35	50.00	H





**LTE band 26(814MHz-824MHz)\_1.4MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
814.70	-10.60	-33.70	-0.80	2.15	20.15	50.00	H
819.00	-10.45	-33.60	-0.75	2.15	20.25	50.00	H
823.30	-10.51	-33.60	-0.79	2.15	20.15	50.00	H

**LTE band 26(814MHz-824MHz)\_3MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
815.50	-10.54	-33.70	-0.80	2.15	20.21	50.00	H
819.00	-10.36	-33.60	-0.75	2.15	20.35	50.00	H
822.50	-10.52	-33.60	-0.79	2.15	20.13	50.00	H

**LTE band 26(814MHz-824MHz)\_5MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
816.50	-10.53	-33.70	-0.80	2.15	20.22	50.00	H
819.00	-10.46	-33.60	-0.75	2.15	20.24	50.00	H
821.50	-10.46	-33.60	-0.79	2.15	20.20	50.00	H

**LTE band 26(814MHz-824MHz)\_10MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
819.00	-10.45	-33.60	-0.80	2.15	20.20	50.00	H
819.00	-10.57	-33.60	-0.75	2.15	20.13	50.00	H
819.00	-10.45	-33.60	-0.79	2.15	20.21	50.00	H

Peak ERP (dBm)=P<sub>Mea</sub>(-9.41dBm)-(P<sub>ci</sub>+P<sub>Ag</sub>)(-33.70dB)+G<sub>a</sub>(-0.80dB) -2.15 =21.34dBm



**LTE band 26(824MHz-849MHz)- ERP Part 22.913(a)**

Limits: ≤38.45dBm (7W)

**LTE band 26(824MHz-849MHz)\_1.4MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
824.70	-9.62	-33.60	-0.79	2.15	21.03	38.45	H
836.50	-9.29	-33.50	-0.74	2.15	21.32	38.45	H
848.30	-9.41	-33.50	-0.73	2.15	21.21	38.45	H

**LTE band 26(824MHz-849MHz)\_3MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
825.50	-9.42	-33.60	-0.79	2.15	21.23	38.45	H
836.50	-9.29	-33.50	-0.74	2.15	21.33	38.45	H
847.50	-9.38	-33.50	-0.73	2.15	21.24	38.45	H

**LTE band 26(824MHz-849MHz)\_5MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
826.50	-9.42	-33.60	-0.79	2.15	21.23	38.45	H
<b>836.50</b>	<b>-9.25</b>	<b>-33.50</b>	<b>-0.74</b>	<b>2.15</b>	<b>21.37</b>	<b>38.45</b>	<b>H</b>
846.50	-9.30	-33.50	-0.73	2.15	21.32	38.45	H

**LTE band 26(824MHz-849MHz)\_10MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
829.00	-9.52	-33.60	-0.79	2.15	21.13	38.45	H
836.50	-9.41	-33.50	-0.74	2.15	21.21	38.45	H
844.00	-9.47	-33.50	-0.73	2.15	21.15	38.45	H

**LTE band 26(824MHz-849MHz)\_15MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
831.50	-9.44	-33.60	-0.79	2.15	21.21	38.45	H
836.50	-9.30	-33.50	-0.74	2.15	21.32	38.45	H
841.50	-9.48	-33.50	-0.73	2.15	21.13	38.45	H



**LTE band 26(824MHz-849MHz)\_1.4MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
824.70	-9.87	-33.60	-0.79	2.15	20.78	38.45	H
836.50	-9.87	-33.50	-0.74	2.15	20.74	38.45	H
848.30	-10.01	-33.50	-0.73	2.15	20.60	38.45	H

**LTE band 26(824MHz-849MHz)\_3MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
825.50	-10.09	-33.60	-0.79	2.15	20.57	38.45	H
836.50	-9.97	-33.50	-0.74	2.15	20.65	38.45	H
847.50	-10.15	-33.50	-0.73	2.15	20.47	38.45	H

**LTE band 26(824MHz-849MHz)\_5MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
826.50	-9.98	-33.60	-0.79	2.15	20.67	38.45	H
836.50	-10.05	-33.50	-0.74	2.15	20.56	38.45	H
846.50	-10.01	-33.50	-0.73	2.15	20.60	38.45	H

**LTE band 26(824MHz-849MHz)\_10MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
829.00	-10.08	-33.60	-0.79	2.15	20.58	38.45	H
836.50	-10.18	-33.50	-0.74	2.15	20.44	38.45	H
844.00	-10.17	-33.50	-0.73	2.15	20.45	38.45	H

**LTE band 26(824MHz-849MHz)\_15MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
831.50	-10.32	-33.60	-0.79	2.15	20.34	38.45	H
836.50	-10.21	-33.50	-0.74	2.15	20.40	38.45	H
841.50	-10.18	-33.50	-0.73	2.15	20.43	38.45	H



**LTE band 26(824MHz-849MHz)\_1.4MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
824.70	-10.53	-33.60	-0.79	2.15	20.12	38.45	H
836.50	-10.40	-33.50	-0.74	2.15	20.21	38.45	H
848.30	-10.42	-33.50	-0.73	2.15	20.20	38.45	H

**LTE band 26(824MHz-849MHz)\_3MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
825.50	-10.42	-33.60	-0.79	2.15	20.23	38.45	H
836.50	-10.29	-33.50	-0.74	2.15	20.32	38.45	H
847.50	-10.54	-33.50	-0.73	2.15	20.07	38.45	H

**LTE band 26(824MHz-849MHz)\_5MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
826.50	-10.50	-33.60	-0.79	2.15	20.16	38.45	H
836.50	-10.37	-33.50	-0.74	2.15	20.25	38.45	H
846.50	-10.41	-33.50	-0.73	2.15	20.21	38.45	H

**LTE band 26(824MHz-849MHz)\_10MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
829.00	-10.53	-33.60	-0.79	2.15	20.12	38.45	H
836.50	-10.56	-33.50	-0.74	2.15	20.06	38.45	H
844.00	-10.55	-33.50	-0.73	2.15	20.07	38.45	H

**LTE band 26(824MHz-849MHz)\_15MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
831.50	-10.51	-33.60	-0.79	2.15	20.15	38.45	H
836.50	-10.57	-33.50	-0.74	2.15	20.04	38.45	H
841.50	-10.52	-33.50	-0.73	2.15	20.10	38.45	H

Peak ERP (dBm)=P<sub>Mea</sub>(-9.25dBm)-(P<sub>ci</sub>+P<sub>Ag</sub>)(-33.50dB)+G<sub>a</sub>(-0.74dB) -2.15=21.37dBm



**LTE Band 41 - EIRP Part 27.50(h)(2)**

Limits: ≤33dBm (2W)

**LTE Band 41\_5MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>c</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
<b>2537.50</b>	<b>-17.57</b>	<b>-28.70</b>	<b>10.70</b>	<b>21.83</b>	<b>33.00</b>	<b>H</b>
2595.00	-17.74	-28.60	10.70	21.56	33.00	H
2652.50	-17.55	-28.50	10.70	21.65	33.00	H

**LTE Band 41\_10MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>c</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2540.00	-17.71	-28.70	10.70	21.69	33.00	H
2595.00	-17.67	-28.60	10.70	21.63	33.00	H
2650.00	-17.62	-28.50	10.70	21.58	33.00	H

**LTE Band 41\_15MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>c</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2542.50	-17.91	-28.70	10.70	21.49	33.00	H
2595.00	-17.85	-28.60	10.70	21.45	33.00	H
2647.50	-17.59	-28.50	10.70	21.61	33.00	H

**LTE Band 41\_20MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>c</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2545.00	-17.91	-28.70	10.70	21.49	33.00	H
2595.00	-17.73	-28.60	10.70	21.57	33.00	H
2645.00	-17.82	-28.50	10.70	21.38	33.00	H



**LTE Band 41\_5MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2537.50	-18.91	-28.70	10.70	20.50	33.00	H
2595.00	-18.72	-28.60	10.70	20.59	33.00	H
2652.50	-18.74	-28.50	10.70	20.46	33.00	H

**LTE Band 41\_10MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2540.00	-18.94	-28.70	10.70	20.46	33.00	H
2595.00	-18.81	-28.60	10.70	20.49	33.00	H
2650.00	-18.82	-28.50	10.70	20.38	33.00	H

**LTE Band 41\_15MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2542.50	-19.04	-28.70	10.70	20.36	33.00	H
2595.00	-18.92	-28.60	10.70	20.38	33.00	H
2647.50	-18.82	-28.50	10.70	20.38	33.00	H

**LTE Band 41\_20 MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2545.00	-19.05	-28.70	10.70	20.35	33.00	H
2595.00	-19.04	-28.60	10.70	20.26	33.00	H
2645.00	-18.95	-28.50	10.70	20.25	33.00	H



**LTE Band 41\_5MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	G <sub>a</sub> Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2537.50	-19.91	-28.70	10.70	19.49	33.00	H
2595.00	-19.72	-28.60	10.70	19.58	33.00	H
2652.50	-19.74	-28.50	10.70	19.46	33.00	H

**LTE Band 41\_10MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	G <sub>a</sub> Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2540.00	-19.83	-28.70	10.70	19.57	33.00	H
2595.00	-19.92	-28.60	10.70	19.38	33.00	H
2650.00	-19.72	-28.50	10.70	19.48	33.00	H

**LTE Band 41\_15MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	G <sub>a</sub> Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2542.50	-20.02	-28.70	10.70	19.38	33.00	H
2595.00	-19.82	-28.60	10.70	19.48	33.00	H
2647.50	-19.84	-28.50	10.70	19.36	33.00	H

**LTE Band 41\_20 MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	G <sub>a</sub> Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2545.00	-19.91	-28.70	10.70	19.50	33.00	H
2595.00	-19.85	-28.60	10.70	19.45	33.00	H
2645.00	-19.84	-28.50	10.70	19.36	33.00	H

Peak EIRP (dBm)=P<sub>Mea</sub>(-17.57dBm)-(P<sub>cl</sub>+P<sub>Ag</sub>) (-28.70dB)+G<sub>a</sub>(10.70dB) =21.83dBm



**LTE Band 66- EIRP Part 27.50(d)**

Limits: ≤30dBm (1W)

**LTE Band 66\_1.4MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1710.70	-15.71	-29.60	8.10	22.00	30.00	H
<b>1745.00</b>	<b>-15.58</b>	<b>-29.50</b>	<b>8.10</b>	<b>22.03</b>	<b>30.00</b>	<b>H</b>
1779.30	-15.72	-29.50	8.10	21.88	30.00	H

**LTE Band 66\_3MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1711.50	-15.81	-29.60	8.10	21.90	30.00	H
1745.00	-15.79	-29.50	8.10	21.81	30.00	H
1778.50	-15.84	-29.50	8.10	21.76	30.00	H

**LTE Band 66\_5MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1712.50	-15.98	-29.60	8.10	21.72	30.00	H
1745.00	-15.80	-29.50	8.10	21.80	30.00	H
1777.50	-15.99	-29.50	8.10	21.61	30.00	H

**LTE Band 66\_10MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1715.00	-15.99	-29.60	8.10	21.71	30.00	H
1745.00	-15.99	-29.50	8.10	21.61	30.00	H
1775.00	-15.79	-29.50	8.10	21.81	30.00	H

**LTE Band 66\_15MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1717.50	-16.12	-29.60	8.10	21.59	30.00	H
1745.00	-16.11	-29.50	8.10	21.50	30.00	H
1772.53	-15.92	-29.50	8.10	21.68	30.00	H

**LTE Band 66\_20MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1720.00	-16.14	-29.60	8.10	21.56	30.00	H
1745.00	-16.11	-29.50	8.10	21.49	30.00	H
1770.00	-16.11	-29.50	8.10	21.49	30.00	H



**LTE Band 66\_1.4MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1710.70	-17.12	-29.60	8.10	20.58	30.00	H
1745.00	-16.89	-29.50	8.10	20.71	30.00	H
1779.30	-17.10	-29.50	8.10	20.50	30.00	H

**LTE Band 66\_3MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1711.50	-17.21	-29.60	8.10	20.49	30.00	H
1745.00	-17.02	-29.50	8.10	20.59	30.00	H
1778.50	-17.00	-29.50	8.10	20.60	30.00	H

**LTE Band 66\_5MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1712.50	-17.14	-29.60	8.10	20.56	30.00	H
1745.00	-16.91	-29.50	8.10	20.69	30.00	H
1777.50	-17.13	-29.50	8.10	20.47	30.00	H

**LTE Band 66\_10MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1715.00	-17.23	-29.60	8.10	20.47	30.00	H
1745.00	-16.97	-29.50	8.10	20.63	30.00	H
1775.00	-17.02	-29.50	8.10	20.58	30.00	H

**LTE Band 66\_15MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1717.50	-17.12	-29.60	8.10	20.58	30.00	H
1745.00	-17.22	-29.50	8.10	20.38	30.00	H
1772.53	-17.14	-29.50	8.10	20.46	30.00	H

**LTE Band 66\_20MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1720.00	-17.23	-29.60	8.10	20.47	30.00	H
1745.00	-17.02	-29.50	8.10	20.58	30.00	H
1770.00	-17.25	-29.50	8.10	20.35	30.00	H



**LTE Band 66\_1.4MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1710.70	-18.21	-29.60	8.10	19.49	30.00	H
1745.00	-17.91	-29.50	8.10	19.69	30.00	H
1779.30	-17.94	-29.50	8.10	19.66	30.00	H

**LTE Band 66\_3MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1711.50	-18.23	-29.60	8.10	19.47	30.00	H
1745.00	-18.11	-29.50	8.10	19.50	30.00	H
1778.50	-18.02	-29.50	8.10	19.58	30.00	H

**LTE Band 66\_5MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1712.50	-18.19	-29.60	8.10	19.52	30.00	H
1745.00	-18.00	-29.50	8.10	19.60	30.00	H
1777.50	-18.11	-29.50	8.10	19.49	30.00	H

**LTE Band 66\_10MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1715.00	-18.21	-29.60	8.10	19.49	30.00	H
1745.00	-18.22	-29.50	8.10	19.38	30.00	H
1775.00	-18.12	-29.50	8.10	19.48	30.00	H

**LTE Band 66\_15MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1717.50	-18.21	-29.60	8.10	19.49	30.00	H
1745.00	-18.38	-29.50	8.10	19.22	30.00	H
1772.53	-18.01	-29.50	8.10	19.59	30.00	H

**LTE Band 66\_20MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1720.00	-18.13	-29.60	8.10	19.57	30.00	H
1745.00	-18.12	-29.50	8.10	19.48	30.00	H
1770.00	-18.22	-29.50	8.10	19.38	30.00	H

Peak EIRP (dBm)=P<sub>Mea</sub>(-15.58dBm)-(P<sub>ci</sub>+P<sub>Ag</sub>)(-29.50dB)+G<sub>a</sub>(8.10dB) =22.03dBm

ANALYZER SETTINGS:

RBW = VBW = 8MHz for occupied bandwidths equal to or less than 5MHz.

RBW = VBW = 20MHz for occupied bandwidths equal to or greater than 10MHz.

Note: The maximum value of expanded measurement uncertainty for this test item is U = 2.87dB(30MHz-3GHz)/3.35dB(3GHz-18GHz), k = 2

**Note: Both of Vertical and Horizontal polarizations are evaluated, but only the worst case is recorded in this report.**



**Lower antenna**

**LTE Band 2- EIRP Part 24. 232(b)**

Limits: ≤33dBm (2W)

**LTE Band 2\_1.4MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>c</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1850.70	-15.52	-29.30	8.10	21.88	33.00	H
1880.00	-15.53	-29.40	8.10	21.97	33.00	H
<b>1909.30</b>	<b>-15.34</b>	<b>-29.30</b>	<b>8.10</b>	<b>22.06</b>	<b>33.00</b>	<b>H</b>

**LTE Band 2\_3MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>c</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1851.50	-15.56	-29.30	8.10	21.84	33.00	H
1880.00	-15.75	-29.40	8.10	21.75	33.00	H
1908.50	-15.61	-29.30	8.10	21.79	33.00	H

**LTE Band 2\_5MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>c</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1852.50	-15.65	-29.30	8.10	21.75	33.00	H
1880.00	-15.87	-29.40	8.10	21.63	33.00	H
1907.50	-15.59	-29.30	8.10	21.81	33.00	H

**LTE Band 2\_10MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>c</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1855.00	-15.68	-29.30	8.10	21.72	33.00	H
1880.00	-15.84	-29.40	8.10	21.66	33.00	H
1905.00	-15.65	-29.30	8.10	21.75	33.00	H

**LTE Band 2\_15MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>c</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1857.50	-15.77	-29.30	8.10	21.63	33.00	H
1880.00	-15.91	-29.40	8.10	21.59	33.00	H
1902.50	-15.70	-29.30	8.10	21.70	33.00	H

**LTE Band 2\_20 MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>c</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1860.00	-15.78	-29.30	8.10	21.62	33.00	H
1880.00	-15.95	-29.40	8.10	21.55	33.00	H
1900.00	-15.74	-29.30	8.10	21.66	33.00	H

**LTE Band 2\_1.4MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1850.70	-16.45	-29.30	8.10	20.95	33.00	H
1880.00	-16.44	-29.40	8.10	21.06	33.00	H
1909.30	-16.29	-29.30	8.10	21.11	33.00	H

**LTE Band 2\_3MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1851.50	-16.49	-29.30	8.10	20.91	33.00	H
1880.00	-16.51	-29.40	8.10	20.99	33.00	H
1908.50	-16.34	-29.30	8.10	21.06	33.00	H

**LTE Band 2\_5MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1852.50	-16.54	-29.30	8.10	20.86	33.00	H
1880.00	-16.46	-29.40	8.10	21.04	33.00	H
1907.50	-16.30	-29.30	8.10	21.10	33.00	H

**LTE Band 2\_10MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1855.00	-16.57	-29.30	8.10	20.83	33.00	H
1880.00	-16.59	-29.40	8.10	20.91	33.00	H
1905.00	-16.44	-29.30	8.10	20.96	33.00	H

**LTE Band 2\_15MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1857.50	-16.60	-29.30	8.10	20.80	33.00	H
1880.00	-16.65	-29.40	8.10	20.85	33.00	H
1902.50	-16.36	-29.30	8.10	21.04	33.00	H

**LTE Band 2\_20 MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1860.00	-16.65	-29.30	8.10	20.75	33.00	H
1880.00	-16.70	-29.40	8.10	20.80	33.00	H
1900.00	-16.44	-29.30	8.10	20.96	33.00	H



**LTE Band 2\_1.4MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1850.70	-17.71	-29.30	8.10	19.69	33.00	H
1880.00	-17.67	-29.40	8.10	19.83	33.00	H
1909.30	-17.76	-29.30	8.10	19.64	33.00	H

**LTE Band 2\_3MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1851.50	-17.76	-29.30	8.10	19.64	33.00	H
1880.00	-18.12	-29.40	8.10	19.38	33.00	H
1908.50	-17.88	-29.30	8.10	19.52	33.00	H

**LTE Band 2\_5MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1852.50	-17.99	-29.30	8.10	19.41	33.00	H
1880.00	-17.88	-29.40	8.10	19.62	33.00	H
1907.50	-17.96	-29.30	8.10	19.44	33.00	H

**LTE Band 2\_10MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1855.00	-17.76	-29.30	8.10	19.64	33.00	H
1880.00	-18.24	-29.40	8.10	19.26	33.00	H
1905.00	-17.78	-29.30	8.10	19.62	33.00	H

**LTE Band 2\_15MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1857.50	-17.93	-29.30	8.10	19.47	33.00	H
1880.00	-17.94	-29.40	8.10	19.56	33.00	H
1902.50	-17.63	-29.30	8.10	19.77	33.00	H

**LTE Band 2\_20 MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1860.00	-17.76	-29.30	8.10	19.64	33.00	H
1880.00	-17.82	-29.40	8.10	19.68	33.00	H
1900.00	-17.78	-29.30	8.10	19.62	33.00	H

Peak EIRP (dBm)=P<sub>Mea</sub>(-15.34dBm)-(P<sub>cl</sub>+P<sub>Ag</sub>)(-29.30dB)+G<sub>a</sub>(8.10dB) =22.06dBm



**LTE Band 4- EIRP Part 27.50(d)**

**Limits:** ≤30dBm (1W)

**LTE Band 4\_1.4MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1710.70	-15.88	-29.60	8.10	21.82	30.00	H
1732.50	-15.86	-29.60	8.10	21.84	30.00	H
1754.30	-15.58	-29.50	8.10	22.02	30.00	H

**LTE Band 4\_3MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1711.50	-15.80	-29.60	8.10	21.90	30.00	H
1732.50	-15.90	-29.60	8.10	21.80	30.00	H
<b>1753.50</b>	<b>-15.57</b>	<b>-29.50</b>	<b>8.10</b>	<b>22.03</b>	<b>30.00</b>	<b>H</b>

**LTE Band 4\_5MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1712.50	-15.84	-29.60	8.10	21.86	30.00	H
1732.50	-15.80	-29.60	8.10	21.90	30.00	H
1752.50	-15.65	-29.50	8.10	21.95	30.00	H

**LTE Band 4\_10MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1715.00	-15.88	-29.60	8.10	21.82	30.00	H
1732.50	-15.93	-29.60	8.10	21.77	30.00	H
1750.00	-15.70	-29.50	8.10	21.90	30.00	H

**LTE Band 4\_15MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1717.50	-15.89	-29.60	8.10	21.81	30.00	H
1732.50	-15.92	-29.60	8.10	21.78	30.00	H
1747.50	-15.67	-29.50	8.10	21.93	30.00	H

**LTE Band 4\_20MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1720.00	-15.98	-29.60	8.10	21.72	30.00	H
1732.50	-16.01	-29.60	8.10	21.69	30.00	H
1745.00	-15.79	-29.50	8.10	21.81	30.00	H



**LTE Band 4\_1.4MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1710.70	-17.04	-29.60	8.10	20.66	30.00	H
1732.50	-16.92	-29.60	8.10	20.78	30.00	H
1754.30	-16.90	-29.50	8.10	20.70	30.00	H

**LTE Band 4\_3MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1711.50	-17.11	-29.60	8.10	20.59	30.00	H
1732.50	-17.14	-29.60	8.10	20.56	30.00	H
1753.50	-16.91	-29.50	8.10	20.69	30.00	H

**LTE Band 4\_5MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1712.50	-17.12	-29.60	8.10	20.58	30.00	H
1732.50	-17.01	-29.60	8.10	20.69	30.00	H
1752.50	-16.85	-29.50	8.10	20.75	30.00	H

**LTE Band 4\_10MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1715.00	-17.18	-29.60	8.10	20.52	30.00	H
1732.50	-17.16	-29.60	8.10	20.54	30.00	H
1750.00	-16.94	-29.50	8.10	20.66	30.00	H

**LTE Band 4\_15MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1717.50	-17.09	-29.60	8.10	20.61	30.00	H
1732.50	-17.13	-29.60	8.10	20.57	30.00	H
1747.50	-16.94	-29.50	8.10	20.66	30.00	H

**LTE Band 4\_20MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1720.00	-17.23	-29.60	8.10	20.47	30.00	H
1732.50	-17.32	-29.60	8.10	20.38	30.00	H
1745.00	-17.01	-29.50	8.10	20.59	30.00	H



**LTE Band 4\_1.4MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1710.70	-18.09	-29.60	8.10	19.61	30.00	H
1732.50	-18.21	-29.60	8.10	19.49	30.00	H
1754.30	-17.86	-29.50	8.10	19.74	30.00	H

**LTE Band 4\_3MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1711.50	-18.39	-29.60	8.10	19.31	30.00	H
1732.50	-18.41	-29.60	8.10	19.29	30.00	H
1753.50	-18.21	-29.50	8.10	19.39	30.00	H

**LTE Band 4\_5MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1712.50	-18.35	-29.60	8.10	19.35	30.00	H
1732.50	-18.47	-29.60	8.10	19.23	30.00	H
1752.50	-18.26	-29.50	8.10	19.34	30.00	H

**LTE Band 4\_10MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1715.00	-18.10	-29.60	8.10	19.60	30.00	H
1732.50	-17.92	-29.60	8.10	19.78	30.00	H
1750.00	-17.86	-29.50	8.10	19.74	30.00	H

**LTE Band 4\_15MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1717.50	-18.42	-29.60	8.10	19.28	30.00	H
1732.50	-18.47	-29.60	8.10	19.23	30.00	H
1747.50	-18.29	-29.50	8.10	19.31	30.00	H

**LTE Band 4\_20MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1720.00	-18.50	-29.60	8.10	19.20	30.00	H
1732.50	-18.29	-29.60	8.10	19.41	30.00	H
1745.00	-18.30	-29.50	8.10	19.30	30.00	H

Peak EIRP (dBm)=P<sub>Mea</sub>(-15.57dBm)-(P<sub>ci</sub>+P<sub>Ag</sub>)(-29.50dB)+G<sub>a</sub>(8.10dB) =22.03dBm





**LTE Band 7- EIRP Part 27.50(h)(2)**

**Limits:** ≤33 dBm (2W)

**LTE Band 7\_5MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	G <sub>a</sub> Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
<b>2502.50</b>	<b>-17.60</b>	<b>-28.70</b>	<b>10.70</b>	<b>21.80</b>	<b>33.00</b>	<b>H</b>
2535.00	-17.72	-28.60	10.70	21.58	33.00	H
2567.50	-17.81	-28.60	10.70	21.49	33.00	H

**LTE Band 7\_10MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	G <sub>a</sub> Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2505.00	-17.80	-28.70	10.70	21.60	33.00	H
2535.00	-17.68	-28.60	10.70	21.62	33.00	H
2565.00	-17.85	-28.60	10.70	21.45	33.00	H

**LTE Band 7\_15MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	G <sub>a</sub> Antenna Gain(dB)	EIRP(dBm)	Limit(dBm)	Polarization
2507.50	-17.81	-28.70	10.70	21.59	33.00	H
2535.00	-17.77	-28.60	10.70	21.53	33.00	H
2562.50	-17.83	-28.60	10.70	21.47	33.00	H

**LTE Band 7\_20MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	G <sub>a</sub> Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2510.00	-17.84	-28.70	10.70	21.56	33.00	H
2535.00	-17.76	-28.60	10.70	21.54	33.00	H
2560.00	-17.85	-28.60	10.70	21.45	33.00	H



**LTE Band 7\_5MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	G <sub>a</sub> Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2502.50	-18.75	-28.70	10.70	20.65	33.00	H
2535.00	-18.70	-28.60	10.70	20.60	33.00	H
2567.50	-18.72	-28.60	10.70	20.58	33.00	H

**LTE Band 7\_10MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	G <sub>a</sub> Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2505.00	-18.79	-28.70	10.70	20.61	33.00	H
2535.00	-18.71	-28.60	10.70	20.59	33.00	H
2565.00	-18.73	-28.60	10.70	20.57	33.00	H

**LTE Band 7\_15MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	G <sub>a</sub> Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2507.50	-18.91	-28.70	10.70	20.50	33.00	H
2535.00	-18.91	-28.60	10.70	20.40	33.00	H
2562.50	-18.92	-28.60	10.70	20.38	33.00	H

**LTE Band 7\_20MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	G <sub>a</sub> Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2510.00	-18.91	-28.70	10.70	20.49	33.00	H
2535.00	-18.84	-28.60	10.70	20.46	33.00	H
2560.00	-18.85	-28.60	10.70	20.45	33.00	H



**LTE Band 7\_5MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	G <sub>a</sub> Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2502.50	-19.62	-28.70	10.70	19.78	33.00	H
2535.00	-19.52	-28.60	10.70	19.78	33.00	H
2567.50	-19.51	-28.60	10.70	19.79	33.00	H

**LTE Band 7\_10MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	G <sub>a</sub> Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2505.00	-19.71	-28.70	10.70	19.69	33.00	H
2535.00	-19.69	-28.60	10.70	19.61	33.00	H
2565.00	-19.65	-28.60	10.70	19.65	33.00	H

**LTE Band 7\_15MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	G <sub>a</sub> Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2507.50	-19.81	-28.70	10.70	19.59	33.00	H
2535.00	-19.74	-28.60	10.70	19.56	33.00	H
2562.50	-19.75	-28.60	10.70	19.55	33.00	H

**LTE Band 7\_20MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	G <sub>a</sub> Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2510.00	-19.74	-28.70	10.70	19.66	33.00	H
2535.00	-19.68	-28.60	10.70	19.62	33.00	H
2560.00	-19.75	-28.60	10.70	19.55	33.00	H

Peak EIRP (dBm)=P<sub>Mea</sub>(-17.60dBm)-(P<sub>cl</sub>+P<sub>Ag</sub>)(-28.70dB)+G<sub>a</sub>(10.70dB) =21.80dBm



**LTE Band 12 - ERP Part 27.50(c)(10)**

Limits: ≤34.77dBm (3W)

**LTE Band 12\_1.4MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
699.70	-10.37	-34.80	-0.93	2.15	21.35	34.77	V
707.50	-10.10	-34.70	-0.91	2.15	21.54	34.77	V
715.30	-10.52	-34.70	-0.68	2.15	21.35	34.77	V

**LTE Band 12\_3MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
<b>700.50</b>	<b>-10.12</b>	<b>-34.80</b>	<b>-0.97</b>	<b>2.15</b>	<b>21.57</b>	<b>34.77</b>	<b>V</b>
707.50	-10.21	-34.70	-0.91	2.15	21.44	34.77	V
714.50	-10.50	-34.70	-0.64	2.15	21.41	34.77	V

**LTE Band 12\_5MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
701.50	-10.21	-34.80	-0.97	2.15	21.47	34.77	V
707.50	-10.10	-34.70	-0.91	2.15	21.54	34.77	V
713.50	-10.45	-34.70	-0.64	2.15	21.46	34.77	V

**LTE Band 12\_10MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
704.00	-10.29	-34.80	-0.97	2.15	21.39	34.77	V
707.50	-10.21	-34.70	-0.91	2.15	21.43	34.77	V
711.00	-10.53	-34.70	-0.64	2.15	21.38	34.77	V



**LTE Band 12\_1.4MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
699.70	-10.65	-34.80	-0.93	2.15	21.07	34.77	V
707.50	-10.67	-34.70	-0.91	2.15	20.98	34.77	V
715.30	-10.79	-34.70	-0.68	2.15	21.08	34.77	V

**LTE Band 12\_3MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
700.50	-10.70	-34.80	-0.97	2.15	20.99	34.77	V
707.50	-10.71	-34.70	-0.91	2.15	20.94	34.77	V
714.50	-11.03	-34.70	-0.64	2.15	20.88	34.77	V

**LTE Band 12\_5MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
701.50	-10.77	-34.80	-0.97	2.15	20.91	34.77	V
707.50	-10.77	-34.70	-0.91	2.15	20.88	34.77	V
713.50	-11.10	-34.70	-0.64	2.15	20.80	34.77	V

**LTE Band 12\_10MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
704.00	-10.75	-34.80	-0.97	2.15	20.93	34.77	V
707.50	-10.80	-34.70	-0.91	2.15	20.85	34.77	V
711.00	-11.15	-34.70	-0.64	2.15	20.76	34.77	V



**LTE Band 12\_1.4MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
699.70	-12.26	-34.80	-0.93	2.15	19.46	34.77	V
707.50	-12.29	-34.70	-0.91	2.15	19.35	34.77	V
715.30	-12.55	-34.70	-0.68	2.15	19.32	34.77	V

**LTE Band 12\_3MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
700.50	-12.34	-34.80	-0.97	2.15	19.34	34.77	V
707.50	-12.35	-34.70	-0.91	2.15	19.29	34.77	V
714.50	-12.69	-34.70	-0.64	2.15	19.22	34.77	V

**LTE Band 12\_5MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
701.50	-12.40	-34.80	-0.97	2.15	19.28	34.77	V
707.50	-12.44	-34.70	-0.91	2.15	19.21	34.77	V
713.50	-12.73	-34.70	-0.64	2.15	19.18	34.77	V

**LTE Band 12\_10MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
704.00	-12.26	-34.80	-0.97	2.15	19.42	34.77	V
707.50	-12.30	-34.70	-0.91	2.15	19.35	34.77	V
711.00	-12.76	-34.70	-0.64	2.15	19.15	34.77	V

Peak ERP (dBm)=P<sub>Mea</sub>(-10.12Bm)-(P<sub>cl</sub>+P<sub>Ag</sub>)(-34.80dB)+G<sub>a</sub>(-0.97dB) -2.15dB =21.57Bm



**LTE band 26(814MHz-824MHz)- ERP Part 90.635(b)**

Limits: ≤50.00dBm (100W)

**LTE band 26(814MHz-824MHz)\_1.4MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
<b>814.70</b>	<b>-9.77</b>	<b>-33.70</b>	<b>-0.80</b>	<b>2.15</b>	<b>20.98</b>	<b>50.00</b>	<b>H</b>
819.00	-9.83	-33.60	-0.75	2.15	20.87	50.00	H
823.30	-9.89	-33.60	-0.79	2.15	20.77	50.00	H

**LTE band 26(814MHz-824MHz)\_3MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
815.50	-9.89	-33.70	-0.80	2.15	20.86	50.00	H
819.00	-9.92	-33.60	-0.75	2.15	20.79	50.00	H
822.50	-9.86	-33.60	-0.79	2.15	20.80	50.00	H

**LTE band 26(814MHz-824MHz)\_5MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
816.50	-9.84	-33.70	-0.80	2.15	20.91	50.00	H
819.00	-9.88	-33.60	-0.75	2.15	20.82	50.00	H
821.50	-9.78	-33.60	-0.79	2.15	20.88	50.00	H

**LTE band 26(814MHz-824MHz)\_10MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
819.00	-9.77	-33.60	-0.80	2.15	20.88	50.00	H
819.00	-9.83	-33.60	-0.75	2.15	20.88	50.00	H
819.00	-9.78	-33.60	-0.79	2.15	20.88	50.00	H



**LTE band 26(814MHz-824MHz)\_1.4MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
814.70	-10.27	-33.70	-0.80	2.15	20.48	50.00	H
819.00	-10.30	-33.60	-0.75	2.15	20.41	50.00	H
823.30	-10.28	-33.60	-0.79	2.15	20.38	50.00	H

**LTE band 26(814MHz-824MHz)\_3MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
815.50	-10.24	-33.70	-0.80	2.15	20.51	50.00	H
819.00	-10.35	-33.60	-0.75	2.15	20.35	50.00	H
822.50	-10.28	-33.60	-0.79	2.15	20.38	50.00	H

**LTE band 26(814MHz-824MHz)\_5MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
816.50	-10.34	-33.70	-0.80	2.15	20.41	50.00	H
819.00	-10.31	-33.60	-0.75	2.15	20.39	50.00	H
821.50	-10.30	-33.60	-0.79	2.15	20.36	50.00	H

**LTE band 26(814MHz-824MHz)\_10MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
819.00	-10.33	-33.60	-0.80	2.15	20.32	50.00	H
819.00	-10.38	-33.60	-0.75	2.15	20.32	50.00	H
819.00	-10.34	-33.60	-0.79	2.15	20.32	50.00	H





**LTE band 26(814MHz-824MHz)\_1.4MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
814.70	-10.76	-33.70	-0.80	2.15	19.99	50.00	H
819.00	-10.83	-33.60	-0.75	2.15	19.88	50.00	H
823.30	-10.74	-33.60	-0.79	2.15	19.91	50.00	H

**LTE band 26(814MHz-824MHz)\_3MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
815.50	-10.78	-33.70	-0.80	2.15	19.97	50.00	H
819.00	-10.86	-33.60	-0.75	2.15	19.85	50.00	H
822.50	-10.76	-33.60	-0.79	2.15	19.90	50.00	H

**LTE band 26(814MHz-824MHz)\_5MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
816.50	-10.88	-33.70	-0.80	2.15	19.87	50.00	H
819.00	-10.86	-33.60	-0.75	2.15	19.85	50.00	H
821.50	-10.82	-33.60	-0.79	2.15	19.83	50.00	H

**LTE band 26(814MHz-824MHz)\_10MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
819.00	-10.85	-33.60	-0.80	2.15	19.80	50.00	H
819.00	-10.90	-33.60	-0.75	2.15	19.80	50.00	H
819.00	-10.86	-33.60	-0.79	2.15	19.80	50.00	H

Peak ERP (dBm)=P<sub>Mea</sub>(-9.77dBm)-(P<sub>ci</sub>+P<sub>Ag</sub>)(-33.70dB)+G<sub>a</sub>(-0.80dB) -2.15 =20.98dBm



**LTE band 26(824MHz-849MHz)- ERP Part 22.913(a)**

**Limits:** ≤38.45dBm (7W)

**LTE band 26(824MHz-849MHz)\_1.4MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
824.70	-9.62	-33.60	-0.79	2.15	21.03	38.45	H
<b>836.50</b>	<b>-9.49</b>	<b>-33.50</b>	<b>-0.74</b>	<b>2.15</b>	<b>21.12</b>	<b>38.45</b>	<b>H</b>
848.30	-9.55	-33.50	-0.73	2.15	21.07	38.45	H

**LTE band 26(824MHz-849MHz)\_3MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
825.50	-9.67	-33.60	-0.79	2.15	20.99	38.45	H
836.50	-9.74	-33.50	-0.74	2.15	20.88	38.45	H
847.50	-9.71	-33.50	-0.73	2.15	20.90	38.45	H

**LTE band 26(824MHz-849MHz)\_5MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
826.50	-9.71	-33.60	-0.79	2.15	20.94	38.45	H
836.50	-9.84	-33.50	-0.74	2.15	20.78	38.45	H
846.50	-9.72	-33.50	-0.73	2.15	20.90	38.45	H

**LTE band 26(824MHz-849MHz)\_10MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
829.00	-9.79	-33.60	-0.79	2.15	20.87	38.45	H
836.50	-9.86	-33.50	-0.74	2.15	20.75	38.45	H
844.00	-9.81	-33.50	-0.73	2.15	20.81	38.45	H

**LTE band 26(824MHz-849MHz)\_15MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
831.50	-9.89	-33.60	-0.79	2.15	20.77	38.45	H
836.50	-9.96	-33.50	-0.74	2.15	20.65	38.45	H
841.50	-9.86	-33.50	-0.73	2.15	20.76	38.45	H



**LTE band 26(824MHz-849MHz)\_1.4MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
824.70	-10.09	-33.60	-0.79	2.15	20.57	38.45	H
836.50	-10.13	-33.50	-0.74	2.15	20.49	38.45	H
848.30	-10.17	-33.50	-0.73	2.15	20.44	38.45	H

**LTE band 26(824MHz-849MHz)\_3MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
825.50	-10.11	-33.60	-0.79	2.15	20.54	38.45	H
836.50	-10.18	-33.50	-0.74	2.15	20.43	38.45	H
847.50	-10.29	-33.50	-0.73	2.15	20.32	38.45	H

**LTE band 26(824MHz-849MHz)\_5MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
826.50	-10.18	-33.60	-0.79	2.15	20.48	38.45	H
836.50	-10.25	-33.50	-0.74	2.15	20.37	38.45	H
846.50	-10.32	-33.50	-0.73	2.15	20.30	38.45	H

**LTE band 26(824MHz-849MHz)\_10MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
829.00	-10.31	-33.60	-0.79	2.15	20.35	38.45	H
836.50	-10.25	-33.50	-0.74	2.15	20.37	38.45	H
844.00	-10.29	-33.50	-0.73	2.15	20.33	38.45	H

**LTE band 26(824MHz-849MHz)\_15MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
831.50	-10.31	-33.60	-0.79	2.15	20.34	38.45	H
836.50	-10.28	-33.50	-0.74	2.15	20.33	38.45	H
841.50	-10.36	-33.50	-0.73	2.15	20.26	38.45	H



**LTE band 26(824MHz-849MHz)\_1.4MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
824.70	-10.64	-33.60	-0.79	2.15	20.01	38.45	H
836.50	-10.66	-33.50	-0.74	2.15	19.96	38.45	H
848.30	-10.72	-33.50	-0.73	2.15	19.90	38.45	H

**LTE band 26(824MHz-849MHz)\_3MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
825.50	-10.71	-33.60	-0.79	2.15	19.95	38.45	H
836.50	-10.75	-33.50	-0.74	2.15	19.86	38.45	H
847.50	-10.81	-33.50	-0.73	2.15	19.81	38.45	H

**LTE band 26(824MHz-849MHz)\_5MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
826.50	-10.84	-33.60	-0.79	2.15	19.82	38.45	H
836.50	-10.70	-33.50	-0.74	2.15	19.91	38.45	H
846.50	-11.27	-33.50	-0.73	2.15	19.35	38.45	H

**LTE band 26(824MHz-849MHz)\_10MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
829.00	-10.87	-33.60	-0.79	2.15	19.79	38.45	H
836.50	-10.86	-33.50	-0.74	2.15	19.75	38.45	H
844.00	-10.94	-33.50	-0.73	2.15	19.68	38.45	H

**LTE band 26(824MHz-849MHz)\_15MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
831.50	-10.81	-33.60	-0.79	2.15	19.85	38.45	H
836.50	-10.78	-33.50	-0.74	2.15	19.83	38.45	H
841.50	-11.27	-33.50	-0.73	2.15	19.34	38.45	H

Peak ERP (dBm)=P<sub>Mea</sub>(-9.49dBm)-(P<sub>ci</sub>+P<sub>Ag</sub>)(-33.50dB)+G<sub>a</sub>(-0.74dB) -2.15=21.12dBm

**LTE Band 41 - EIRP Part 27.50(h)(2)**Limits:  $\leq 33\text{dBm}$  (2W)**LTE Band 41\_5MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>c</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
<b>2537.50</b>	<b>-17.15</b>	<b>-28.70</b>	<b>10.70</b>	<b>22.25</b>	<b>33.00</b>	<b>H</b>
2595.00	-17.13	-28.60	10.70	22.17	33.00	H
2652.50	-17.09	-28.50	10.70	22.11	33.00	H

**LTE Band 41\_10MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>c</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2540.00	-17.22	-28.70	10.70	22.18	33.00	H
2595.00	-17.17	-28.60	10.70	22.13	33.00	H
2650.00	-17.19	-28.50	10.70	22.02	33.00	H

**LTE Band 41\_15MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>c</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2542.50	-17.18	-28.70	10.70	22.22	33.00	H
2595.00	-17.31	-28.60	10.70	22.00	33.00	H
2647.50	-17.31	-28.50	10.70	21.89	33.00	H

**LTE Band 41\_20MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>c</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2545.00	-17.37	-28.70	10.70	22.03	33.00	H
2595.00	-17.48	-28.60	10.70	21.82	33.00	H
2645.00	-17.51	-28.50	10.70	21.69	33.00	H



**LTE Band 41\_5MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2537.50	-18.75	-28.70	10.70	20.65	33.00	H
2595.00	-18.28	-28.60	10.70	21.02	33.00	H
2652.50	-18.65	-28.50	10.70	20.55	33.00	H

**LTE Band 41\_10MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2540.00	-18.79	-28.70	10.70	20.61	33.00	H
2595.00	-18.41	-28.60	10.70	20.89	33.00	H
2650.00	-18.67	-28.50	10.70	20.53	33.00	H

**LTE Band 41\_15MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2542.50	-18.89	-28.70	10.70	20.51	33.00	H
2595.00	-18.51	-28.60	10.70	20.80	33.00	H
2647.50	-18.71	-28.50	10.70	20.49	33.00	H

**LTE Band 41\_20 MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2545.00	-18.94	-28.70	10.70	20.46	33.00	H
2595.00	-18.49	-28.60	10.70	20.81	33.00	H
2645.00	-18.70	-28.50	10.70	20.50	33.00	H



**LTE Band 41\_5MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	G <sub>a</sub> Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2537.50	-19.82	-28.70	10.70	19.58	33.00	H
2595.00	-19.63	-28.60	10.70	19.67	33.00	H
2652.50	-19.94	-28.60	10.70	19.36	33.00	H

**LTE Band 41\_10MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	G <sub>a</sub> Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2540.00	-19.91	-28.70	10.70	19.49	33.00	H
2595.00	-19.71	-28.60	10.70	19.59	33.00	H
2650.00	-19.89	-28.60	10.70	19.41	33.00	H

**LTE Band 41\_15MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	G <sub>a</sub> Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2542.50	-19.93	-28.70	10.70	19.47	33.00	H
2595.00	-19.69	-28.60	10.70	19.61	33.00	H
2647.50	-19.96	-28.60	10.70	19.34	33.00	H

**LTE Band 41\_20 MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>cl</sub> (dB)+ P <sub>Ag</sub> (dB)	G <sub>a</sub> Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2545.00	-19.98	-28.70	10.70	19.42	33.00	H
2595.00	-19.75	-28.60	10.70	19.55	33.00	H
2645.00	-20.05	-28.60	10.70	19.25	33.00	H

Peak EIRP (dBm)=P<sub>Mea</sub>(-17.15dBm)-(P<sub>cl</sub>+P<sub>Ag</sub>) (-28.70dB)+G<sub>a</sub>(10.70dB) =22.25dBm



**LTE Band 66- EIRP Part 27.50(d)**

Limits: ≤30dBm (1W)

**LTE Band 66\_1.4MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1710.70	-15.43	-29.60	8.10	22.27	30.00	H
1745.00	-15.49	-29.50	8.10	22.11	30.00	H
1779.30	-15.57	-29.50	8.10	22.03	30.00	H

**LTE Band 66\_3MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1711.50	-15.73	-29.60	8.10	21.97	30.00	H
1745.00	-15.65	-29.50	8.10	21.95	30.00	H
1778.50	-15.69	-29.50	8.10	21.92	30.00	H

**LTE Band 66\_5MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1712.50	-15.65	-29.60	8.10	22.05	30.00	H
1745.00	-15.61	-29.50	8.10	22.00	30.00	H
1777.50	-15.66	-29.50	8.10	21.94	30.00	H

**LTE Band 66\_10MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1715.00	-15.87	-29.60	8.10	21.83	30.00	H
1745.00	-15.88	-29.50	8.10	21.72	30.00	H
1775.00	-16.00	-29.50	8.10	21.60	30.00	H

**LTE Band 66\_15MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1717.50	-15.97	-29.60	8.10	21.73	30.00	H
1745.00	-16.02	-29.50	8.10	21.58	30.00	H
1772.53	-16.11	-29.50	8.10	21.49	30.00	H

**LTE Band 66\_20MHz\_QPSK**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1720.00	-16.09	-29.60	8.10	21.61	30.00	H
1745.00	-16.10	-29.50	8.10	21.50	30.00	H
1770.00	-16.13	-29.50	8.10	21.47	30.00	H



**LTE Band 66\_1.4MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1710.70	-16.96	-29.60	8.10	20.74	30.00	H
1745.00	-17.02	-29.50	8.10	20.58	30.00	H
1779.30	-17.07	-29.50	8.10	20.53	30.00	H

**LTE Band 66\_3MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1711.50	-16.98	-29.60	8.10	20.72	30.00	H
1745.00	-16.99	-29.50	8.10	20.61	30.00	H
1778.50	-17.11	-29.50	8.10	20.49	30.00	H

**LTE Band 66\_5MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1712.50	-17.13	-29.60	8.10	20.57	30.00	H
1745.00	-17.11	-29.50	8.10	20.49	30.00	H
1777.50	-17.15	-29.50	8.10	20.45	30.00	H

**LTE Band 66\_10MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1715.00	-17.09	-29.60	8.10	20.61	30.00	H
1745.00	-17.05	-29.50	8.10	20.55	30.00	H
1775.00	-17.18	-29.50	8.10	20.42	30.00	H

**LTE Band 66\_15MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1717.50	-17.15	-29.60	8.10	20.55	30.00	H
1745.00	-17.13	-29.50	8.10	20.48	30.00	H
1772.53	-17.15	-29.50	8.10	20.45	30.00	H

**LTE Band 66\_20MHz\_16QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1720.00	-17.12	-29.60	8.10	20.58	30.00	H
1745.00	-17.11	-29.50	8.10	20.49	30.00	H
1770.00	-17.21	-29.50	8.10	20.39	30.00	H



**LTE Band 66\_1.4MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1710.70	-17.89	-29.60	8.10	19.81	30.00	H
1745.00	-17.89	-29.50	8.10	19.71	30.00	H
1779.30	-18.00	-29.50	8.10	19.60	30.00	H

**LTE Band 66\_3MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1711.50	-18.01	-29.60	8.10	19.69	30.00	H
1745.00	-17.99	-29.50	8.10	19.61	30.00	H
1778.50	-18.05	-29.50	8.10	19.55	30.00	H

**LTE Band 66\_5MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1712.50	-18.07	-29.60	8.10	19.63	30.00	H
1745.00	-18.22	-29.50	8.10	19.38	30.00	H
1777.50	-18.25	-29.50	8.10	19.36	30.00	H

**LTE Band 66\_10MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1715.00	-18.17	-29.60	8.10	19.53	30.00	H
1745.00	-18.15	-29.50	8.10	19.45	30.00	H
1775.00	-18.29	-29.50	8.10	19.31	30.00	H

**LTE Band 66\_15MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1717.50	-18.15	-29.60	8.10	19.55	30.00	H
1745.00	-18.21	-29.50	8.10	19.40	30.00	H
1772.53	-18.17	-29.50	8.10	19.43	30.00	H

**LTE Band 66\_20MHz\_64QAM**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	P <sub>ci</sub> (dB)+ P <sub>Ag</sub> (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1720.00	-18.18	-29.60	8.10	19.52	30.00	H
1745.00	-18.19	-29.50	8.10	19.41	30.00	H
1770.00	-18.15	-29.50	8.10	19.45	30.00	H

Peak EIRP (dBm)=P<sub>Mea</sub>(-15.43dBm)-(P<sub>ci</sub>+P<sub>Ag</sub>)(-29.60dB)+G<sub>a</sub>(8.10dB) =22.27dBm

ANALYZER SETTINGS:

RBW = VBW = 8MHz for occupied bandwidths equal to or less than 5MHz.

RBW = VBW = 20MHz for occupied bandwidths equal to or greater than 10MHz.

Note: The maximum value of expanded measurement uncertainty for this test item is U = 2.87dB(30MHz-3GHz)/3.35dB(3GHz-18GHz), k = 2

**Note: Both of Vertical and Horizontal polarizations are evaluated, but only the worst case is recorded in this report.**

**A.2 FIELD STRENGTH OF SPURIOUS RADIATION**

**Reference**

FCC: CFR 2.1053, 22.917, 24.238, 27.53, 90.543(e),90.691.

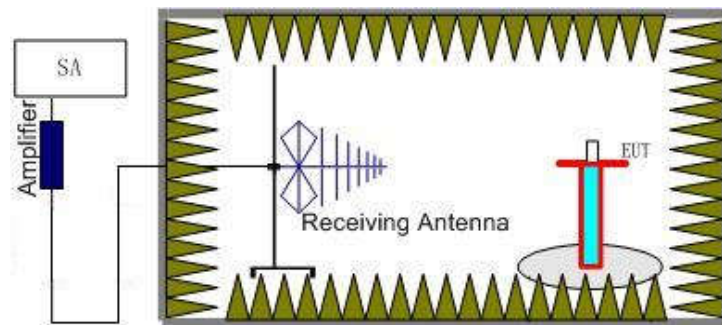
**A.2.1 Measurement Method**

This measurement is carried out in fully-anechoic chamber FAC-3.

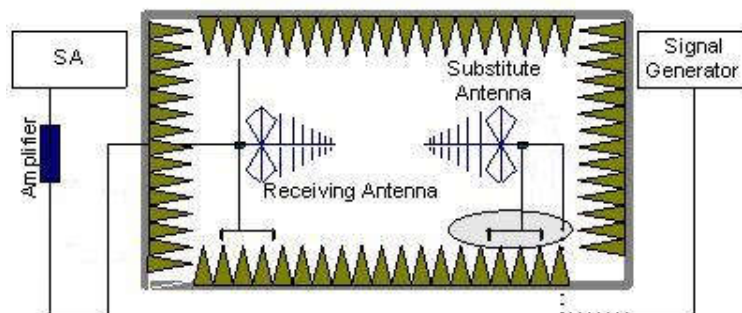
The spectrum was scanned from 30 MHz to the 10th harmonic of the highest frequency generated within the equipment, which is the transmitted carrier. The resolution bandwidth is set 1MHz as outlined in Part 22.917, 24.238, 27.53(h) and 90.691. The spectrum was scanned with the mobile station transmitting at carrier frequencies that pertain to low, mid and high channels of the LTE Bands 2,4,5,7,12,17,18,19,26,38,41,66.

**The procedure of radiated spurious emissions is as follows:**

1. For radiated emissions measurements performed at frequencies less than or equal to 1 GHz, EUT was placed on a 80 cm high non-conductive stand at a 3 meter test distance from the receive antenna. For radiated measurements performed at frequencies above 1 GHz, EUT was placed on a 1.5 meter high non-conductive stand at a 3 meter test distance from the receive antenna. Receiving antenna was placed on the antenna mast 3 meters from the EUT. For emission measurements. The receiving antenna shall be varied from 1 m to 4 m in height above the reference ground in a search for the relative positioning that produces the maximum radiated signal level. The test setup refers to figure below. Detected emissions were maximized at each frequency by rotating the EUT through 360° and adjusting the receiving antenna polarization. The radiated emission measurements of all transmit frequencies in three channels (High, Middle, Low) were measured with peak detector.



2. The EUT is then put into continuously transmitting mode at its maximum power level during the test. And the maximum value of the receiver should be recorded as (Pr).
3. The EUT shall be replaced by a substitution antenna. The test setup refers to figure below.





In the chamber, a substitution antenna for the frequency band of interest is placed at the reference point of the chamber. An RF Signal source for the frequency band of interest is connected to the substitution antenna with a cable that has been constructed to not interfere with the radiation pattern of the antenna. A power ( $P_{Mea}$ ) is applied to the input of the substitution antenna and adjusts the level of the signal generator output until the value of the receiver reaches the previously recorded ( $P_r$ ). The power of signal source ( $P_{Mea}$ ) is recorded. The test should be performed by rotating the test item and adjusting the receiving antenna polarization.

4. The Path loss ( $P_{pl}$ ) between the Signal Source with the Substitution Antenna and the Substitution Antenna Gain(dBi) ( $G_a$ ) should be recorded after test.

An amplifier should be connected in for the test.

The Path loss ( $P_{pl}$ ) is the summation of the cable loss and the gain of the amplifier.

The measurement results are obtained as described below:

$$\text{Power (EIRP)} = P_{Mea} - P_{pl} + G_a$$

5. This value is EIRP since the measurement is calibrated using an antenna of known gain (unit: dBi) and known input power.
6. ERP can be calculated from EIRP by subtracting the gain of the dipole,  $ERP = EIRP - 2.15\text{dB}$ .

#### **A.2.2 Measurement Results**

Radiated emissions measurements were made only at the upper, middle, and lower carrier frequencies of the LTE Bands 2,4,5,7,12,17,18,19,26,38,41,66. It was decided that measurements at these three carrier frequencies would be sufficient to demonstrate compliance with emissions limits because it was seen that all the significant spurs occur well outside the band and no radiation was seen from a carrier in one block of the LTE Bands 2,4,5,7,12,17,18,19,26,38,41,66. into any of the other blocks. The equipment must still, however, meet emissions requirements with the carrier at all frequencies over which it is capable of operating and it is the manufacturer's responsibility to verify this.

Only worst case result is given below.

**Upper antenna****LTE Band 2, 1.4MHz, QPSK, Channel 18607**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16959.52	-45.10	2.90	16.50	-31.50	-13.00	H
17310.00	-43.43	3.20	14.50	-32.13	-13.00	H
17460.48	-41.66	2.90	14.50	-30.06	-13.00	H
17590.00	-39.11	3.30	12.80	-29.61	-13.00	H
17776.67	-40.65	3.60	12.80	-31.45	-13.00	H
18000.00	-31.65	3.20	6.20	-28.65	-13.00	H

**LTE Band 2, 1.4MHz, QPSK, Channel 18900**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16966.19	-45.53	2.90	16.50	-31.93	-13.00	H
17268.10	-43.21	3.20	14.50	-31.91	-13.00	H
17447.14	-42.41	2.90	14.50	-30.81	-13.00	H
17569.05	-40.05	3.30	12.80	-30.55	-13.00	H
17836.67	-40.03	3.60	12.80	-30.83	-13.00	H
17993.81	-38.21	3.20	12.80	-28.61	-13.00	H

**LTE Band 2, 1.4MHz, QPSK, Channel 19193**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16958.57	-45.30	2.90	16.50	-31.70	-13.00	H
17312.38	-43.60	3.20	14.50	-32.30	-13.00	H
17488.57	-41.93	2.90	14.50	-30.33	-13.00	H
17608.57	-39.81	3.30	12.80	-30.31	-13.00	H
17835.71	-40.44	3.60	12.80	-31.24	-13.00	H
17938.10	-38.13	3.20	12.80	-28.53	-13.00	H

**LTE Band 2, 1.4MHz, 16QAM, Channel 18607**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16960.00	-45.20	2.90	16.50	-31.60	-13.00	H
17110.95	-43.22	2.90	14.50	-31.62	-13.00	H
17523.33	-40.12	2.90	12.80	-30.22	-13.00	H
17621.90	-39.61	3.30	12.80	-30.11	-13.00	H
17839.05	-40.44	3.60	12.80	-31.24	-13.00	H
17969.52	-38.41	3.20	12.80	-28.81	-13.00	H

**LTE Band 2, 1.4MHz, 16QAM, Channel 18900**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
17121.90	-43.39	2.90	14.50	-31.79	-13.00	H
17298.57	-42.43	3.20	14.50	-31.13	-13.00	H
17521.90	-40.11	2.90	12.80	-30.21	-13.00	H
17625.71	-40.09	3.30	12.80	-30.59	-13.00	H
17800.00	-40.32	3.60	12.80	-31.12	-13.00	H
17953.33	-38.38	3.20	12.80	-28.78	-13.00	H

**LTE Band 2, 1.4MHz, 16QAM, Channel 19193**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16935.24	-45.20	2.90	16.50	-31.60	-13.00	H
17282.38	-42.81	3.20	14.50	-31.51	-13.00	H
17442.38	-41.42	2.90	14.50	-29.82	-13.00	H
17593.33	-40.14	3.30	12.80	-30.64	-13.00	H
17829.52	-40.25	3.60	12.80	-31.05	-13.00	H
17984.29	-38.32	3.20	12.80	-28.72	-13.00	H



**LTE Band 2, 1.4MHz, 64QAM, Channel 18607**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16978.57	-45.23	2.90	16.50	-31.63	-13.00	H
17340.00	-43.18	3.20	14.50	-31.88	-13.00	H
17444.76	-42.12	2.90	14.50	-30.52	-13.00	H
17602.38	-39.65	3.30	12.80	-30.15	-13.00	H
17836.67	-39.63	3.60	12.80	-30.43	-13.00	H
17939.52	-37.95	3.20	12.80	-28.35	-13.00	H

**LTE Band 2, 1.4MHz, 64QAM, Channel 18900**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16935.24	-45.61	2.90	16.50	-32.01	-13.00	H
17298.10	-42.25	3.20	14.50	-30.95	-13.00	H
17511.43	-40.20	2.90	12.80	-30.30	-13.00	H
17616.19	-39.71	3.30	12.80	-30.21	-13.00	H
17797.62	-39.74	3.60	12.80	-30.54	-13.00	H
17995.71	-37.99	3.20	12.80	-28.39	-13.00	H

**LTE Band 2, 1.4MHz, 64QAM, Channel 19193**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16967.62	-45.56	2.90	16.50	-31.96	-13.00	H
17252.86	-43.57	3.20	14.50	-32.27	-13.00	H
17449.52	-42.05	2.90	14.50	-30.45	-13.00	H
17642.38	-39.34	3.30	12.80	-29.84	-13.00	H
17797.14	-40.17	3.60	12.80	-30.97	-13.00	H
17992.86	-38.11	3.20	12.80	-28.51	-13.00	H

Note: The maximum value of expanded measurement uncertainty for this test item is  $U = 2.87\text{dB}(30\text{MHz}-3\text{GHz})/3.35\text{dB}(3\text{GHz}-18\text{GHz})/2.68\text{dB}(18\text{GHz}-40\text{GHz})$ ,  $k = 2$

**LTE Band 4, 1.4MHz QPSK, Channel 19957**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16988.57	-44.99	2.90	16.50	-31.39	-13.00	H
17354.76	-43.00	3.20	14.50	-31.70	-13.00	H
17502.38	-40.25	2.90	12.80	-30.35	-13.00	H
17570.95	-39.81	3.30	12.80	-30.31	-13.00	H
17820.00	-39.18	3.60	12.80	-29.98	-13.00	H
17995.24	-38.47	3.20	12.80	-28.87	-13.00	H

**LTE Band 4, 1.4MHz, QPSK, Channel 20175**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16979.52	-45.22	2.90	16.50	-31.62	-13.00	H
17364.29	-42.34	3.20	14.50	-31.04	-13.00	H
17441.90	-40.94	2.90	14.50	-29.34	-13.00	H
17525.71	-39.84	2.90	12.80	-29.94	-13.00	H
17774.76	-38.63	3.60	12.80	-29.43	-13.00	H
17930.95	-37.08	3.20	12.80	-27.48	-13.00	H

**LTE Band 4, 1.4MHz, QPSK, Channel 20393**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16922.86	-45.23	2.90	16.50	-31.63	-13.00	H
17101.90	-43.91	2.90	14.50	-32.31	-13.00	H
17438.10	-41.89	2.90	14.50	-30.29	-13.00	H
17550.95	-40.16	2.90	12.80	-30.26	-13.00	H
17830.95	-39.66	3.60	12.80	-30.46	-13.00	H
17928.57	-37.29	3.20	12.80	-27.69	-13.00	H





**LTE Band 4, 1.4MHz, 16QAM, Channel 19957**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
17080.95	-44.52	2.90	14.50	-32.92	-13.00	H
17271.43	-42.77	3.20	14.50	-31.47	-13.00	H
17417.14	-41.88	2.90	14.50	-30.28	-13.00	H
17574.76	-40.19	3.30	12.80	-30.69	-13.00	H
17824.29	-39.51	3.60	12.80	-30.31	-13.00	H
17999.05	-37.93	3.20	12.80	-28.33	-13.00	H

**LTE Band 4, 1.4MHz, 16QAM, Channel 20175**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16944.29	-45.46	2.90	16.50	-31.86	-13.00	H
17276.19	-43.29	3.20	14.50	-31.99	-13.00	H
17524.29	-40.07	2.90	12.80	-30.17	-13.00	H
17580.00	-38.89	3.30	12.80	-29.39	-13.00	H
17838.57	-40.17	3.60	12.80	-30.97	-13.00	H
17980.95	-38.15	3.20	12.80	-28.55	-13.00	H

**LTE Band 4, 1.4MHz, 16QAM, Channel 20393**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
17000.95	-43.48	2.90	14.50	-31.88	-13.00	H
17256.67	-43.38	3.20	14.50	-32.08	-13.00	H
17447.62	-41.99	2.90	14.50	-30.39	-13.00	H
17526.19	-40.10	2.90	12.80	-30.20	-13.00	H
17706.67	-40.67	3.30	12.80	-31.17	-13.00	H
17997.14	-36.65	3.20	12.80	-27.05	-13.00	H



**LTE Band 4, 1.4MHz, 64QAM, Channel 19957**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
17137.14	-43.23	2.90	14.50	-31.63	-13.00	H
17319.05	-42.37	3.20	14.50	-31.07	-13.00	H
17486.19	-42.08	2.90	14.50	-30.48	-13.00	H
17560.48	-40.60	2.90	12.80	-30.70	-13.00	H
17777.62	-39.98	3.60	12.80	-30.78	-13.00	H
17943.33	-37.67	3.20	12.80	-28.07	-13.00	H

**LTE Band 4, 1.4MHz, 64QAM, Channel 20175**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16918.57	-45.69	2.90	16.50	-32.09	-13.00	H
17171.90	-42.65	2.90	14.50	-31.05	-13.00	H
17491.90	-41.77	2.90	14.50	-30.17	-13.00	H
17568.57	-39.67	3.30	12.80	-30.17	-13.00	H
17710.95	-40.75	3.30	12.80	-31.25	-13.00	H
17990.00	-37.98	3.20	12.80	-28.38	-13.00	H

**LTE Band 4, 1.4MHz, 64QAM, Channel 20393**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
17001.43	-43.16	2.90	14.50	-31.56	-13.00	H
17358.10	-43.11	3.20	14.50	-31.81	-13.00	H
17492.38	-41.85	2.90	14.50	-30.25	-13.00	H
17579.52	-40.08	3.30	12.80	-30.58	-13.00	H
17832.38	-40.31	3.60	12.80	-31.11	-13.00	H
17997.62	-37.84	3.20	12.80	-28.24	-13.00	H

Note: The maximum value of expanded measurement uncertainty for this test item is  $U = 2.87\text{dB}(30\text{MHz}-3\text{GHz})/3.35\text{dB}(3\text{GHz}-18\text{GHz})/2.68\text{dB}(18\text{GHz}-40\text{GHz})$ ,  $k = 2$

**LTE Band 7, 5 MHz, QPSK, Channel 20775**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16937.62	-55.35	2.90	16.50	-41.75	-25.00	H
17294.29	-53.23	3.20	14.50	-41.93	-25.00	H
17461.90	-51.81	2.90	14.50	-40.21	-25.00	H
17568.57	-49.79	3.30	12.80	-40.29	-25.00	H
17837.62	-49.69	3.60	12.80	-40.49	-25.00	H
17982.86	-47.84	3.20	12.80	-38.24	-25.00	H

**LTE Band 7, 5 MHz, QPSK, Channel 21100**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16960.48	-55.18	2.90	16.50	-41.58	-25.00	H
17275.71	-53.45	3.20	14.50	-42.15	-25.00	H
17497.62	-52.04	2.90	14.50	-40.44	-25.00	H
17591.43	-49.70	3.30	12.80	-40.20	-25.00	H
17833.33	-49.91	3.60	12.80	-40.71	-25.00	H
17977.62	-47.58	3.20	12.80	-37.98	-25.00	H

**LTE Band 7, 5 MHz, QPSK, Channel 21425**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16992.38	-54.85	2.90	16.50	-41.25	-25.00	H
17365.24	-53.08	3.20	14.50	-41.78	-25.00	H
17516.19	-49.95	2.90	12.80	-40.05	-25.00	H
17619.05	-49.70	3.30	12.80	-40.20	-25.00	H
17821.43	-49.93	3.60	12.80	-40.73	-25.00	H
17937.62	-47.94	3.20	12.80	-38.34	-25.00	H



**LTE Band 7, 5 MHz, 16QAM, Channel 20775**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16992.38	-55.13	2.90	16.50	-41.53	-25.00	H
17299.52	-53.14	3.20	14.50	-41.84	-25.00	H
17450.95	-51.69	2.90	14.50	-40.09	-25.00	H
17620.00	-49.35	3.30	12.80	-39.85	-25.00	H
17831.90	-50.02	3.60	12.80	-40.82	-25.00	H
17985.24	-47.67	3.20	12.80	-38.07	-25.00	H

**LTE Band 7, 5 MHz, 16QAM, Channel 21100**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16935.71	-55.27	2.90	16.50	-41.67	-25.00	H
17297.62	-53.19	3.20	14.50	-41.89	-25.00	H
17450.00	-51.68	2.90	14.50	-40.08	-25.00	H
17601.90	-49.50	3.30	12.80	-40.00	-25.00	H
17837.14	-49.64	3.60	12.80	-40.44	-25.00	H
17984.29	-47.45	3.20	12.80	-37.85	-25.00	H

**LTE Band 7, 5 MHz, 16QAM, Channel 21425**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16988.10	-54.64	2.90	16.50	-41.04	-25.00	H
17120.00	-53.64	2.90	14.50	-42.04	-25.00	H
17521.90	-50.10	2.90	12.80	-40.20	-25.00	H
17589.52	-49.56	3.30	12.80	-40.06	-25.00	H
17830.95	-49.91	3.60	12.80	-40.71	-25.00	H
17937.62	-47.88	3.20	12.80	-38.28	-25.00	H



**LTE Band 7, 5 MHz, 64QAM, Channel 20775**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16980.48	-55.04	2.90	16.50	-41.44	-25.00	H
17295.24	-53.18	3.20	14.50	-41.88	-25.00	H
17505.24	-50.13	2.90	12.80	-40.23	-25.00	H
17616.67	-49.66	3.30	12.80	-40.16	-25.00	H
17820.00	-50.09	3.60	12.80	-40.89	-25.00	H
17998.57	-47.87	3.20	12.80	-38.27	-25.00	H

**LTE Band 7, 5 MHz, 64QAM, Channel 21100**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16976.67	-55.12	2.90	16.50	-41.52	-25.00	H
17213.33	-53.15	2.90	14.50	-41.55	-25.00	H
17523.33	-49.74	2.90	12.80	-39.84	-25.00	H
17620.00	-49.65	3.30	12.80	-40.15	-25.00	H
17839.05	-49.79	3.60	12.80	-40.59	-25.00	H
17977.14	-47.84	3.20	12.80	-38.24	-25.00	H

**LTE Band 7, 5 MHz, 64QAM, Channel 21425**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16927.14	-55.13	2.90	16.50	-41.53	-25.00	H
17122.86	-53.29	2.90	14.50	-41.69	-25.00	H
17458.10	-51.51	2.90	14.50	-39.91	-25.00	H
17593.33	-49.29	3.30	12.80	-39.79	-25.00	H
17836.19	-49.58	3.60	12.80	-40.38	-25.00	H
17934.29	-47.79	3.20	12.80	-38.19	-25.00	H

Note: The maximum value of expanded measurement uncertainty for this test item is  $U = 2.87\text{dB}(30\text{MHz}-3\text{GHz})/3.35\text{dB}(3\text{GHz}-18\text{GHz})/2.68\text{dB}(18\text{GHz}-40\text{GHz})$ ,  $k = 2$



**LTE Band 12, 1.4MHz, QPSK, Channel 23017**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak ERP(dBm)	Limit(dBm)	Polarization
8481.38	-52.27	1.80	11.30	-44.92	-13.00	V
9105.50	-50.84	2.20	11.60	-43.59	-13.00	H
9306.00	-50.21	2.00	11.60	-42.76	-13.00	H
9475.25	-51.15	2.10	11.60	-43.80	-13.00	V
9744.88	-50.83	2.20	11.20	-43.98	-13.00	H
9792.00	-50.99	2.30	11.20	-44.24	-13.00	H

**LTE Band 12, 1.4MHz, QPSK, Channel 23095**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak ERP(dBm)	Limit(dBm)	Polarization
8900.25	-52.02	1.90	12.00	-44.07	-13.00	H
9112.50	-51.83	2.10	11.60	-44.48	-13.00	H
9309.00	-50.30	2.00	11.60	-42.85	-13.00	H
9472.63	-51.37	2.10	11.60	-44.02	-13.00	V
9738.38	-50.93	2.20	11.20	-44.08	-13.00	H
9810.38	-50.73	2.30	11.20	-43.98	-13.00	H

**LTE Band 12, 1.4MHz, QPSK, Channel 23173**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak ERP(dBm)	Limit(dBm)	Polarization
8526.75	-51.77	2.10	12.00	-44.02	-13.00	H
9096.50	-51.78	2.20	11.60	-44.53	-13.00	H
9299.38	-50.47	2.00	11.60	-43.02	-13.00	H
9473.50	-50.75	2.10	11.60	-43.40	-13.00	V
9719.00	-50.23	2.20	11.20	-43.38	-13.00	H
9788.88	-51.01	2.30	11.20	-44.26	-13.00	H



**LTE Band 12, 1.4MHz, 16QAM, Channel 23017**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak ERP(dBm)	Limit(dBm)	Polarization
7385.25	-52.69	1.70	12.00	-44.54	-13.00	V
9093.13	-50.98	2.20	11.60	-43.73	-13.00	H
9291.75	-49.81	2.00	11.60	-42.36	-13.00	H
9476.13	-50.36	2.10	11.60	-43.01	-13.00	V
9722.38	-49.84	2.20	11.20	-42.99	-13.00	H
9788.63	-50.62	2.30	11.20	-43.87	-13.00	H

**LTE Band 12, 1.4MHz 16QAM, Channel 23095**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak ERP(dBm)	Limit(dBm)	Polarization
8340.75	-51.38	1.80	11.30	-44.03	-13.00	H
8722.50	-52.09	2.00	12.00	-44.24	-13.00	H
9106.50	-51.41	2.10	11.60	-44.06	-13.00	H
9293.13	-50.42	2.00	11.60	-42.97	-13.00	H
9474.88	-50.54	2.10	11.60	-43.19	-13.00	V
9791.00	-50.63	2.30	11.20	-43.88	-13.00	H

**LTE Band 12, 1.4MHz, 16QAM, Channel 23173**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak ERP(dBm)	Limit(dBm)	Polarization
7273.50	-52.69	1.90	12.00	-44.74	-13.00	H
9095.88	-51.71	2.20	11.60	-44.46	-13.00	H
9307.38	-50.40	2.00	11.60	-42.95	-13.00	H
9475.13	-50.47	2.10	11.60	-43.12	-13.00	V
9723.88	-50.34	2.20	11.20	-43.49	-13.00	H
9796.00	-50.74	2.30	11.20	-43.99	-13.00	H



**LTE Band 12, 1.4MHz, 64QAM, Channel 23017**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak ERP(dBm)	Limit(dBm)	Polarization
8427.00	-51.76	1.80	11.30	-44.41	-13.00	H
8522.63	-51.90	2.10	12.00	-44.15	-13.00	H
9301.75	-50.53	2.00	11.60	-43.08	-13.00	H
9481.25	-51.00	2.10	11.60	-43.65	-13.00	V
9749.25	-50.97	2.20	11.20	-44.12	-13.00	H
9792.63	-50.55	2.30	11.20	-43.80	-13.00	H

**LTE Band 12, 1.4MHz 64QAM, Channel 23095**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak ERP(dBm)	Limit(dBm)	Polarization
7374.00	-52.54	1.70	12.00	-44.39	-13.00	H
9101.00	-51.88	2.20	11.60	-44.63	-13.00	H
9225.13	-50.77	2.10	11.60	-43.42	-13.00	H
9475.25	-50.77	2.10	11.60	-43.42	-13.00	V
9723.38	-50.63	2.20	11.20	-43.78	-13.00	H
9783.25	-51.02	2.30	11.20	-44.27	-13.00	H

**LTE Band 12, 1.4MHz, 64QAM, Channel 23173**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak ERP(dBm)	Limit(dBm)	Polarization
8430.75	-51.99	1.80	11.30	-44.64	-13.00	V
9104.88	-50.67	2.20	11.60	-43.42	-13.00	H
9298.25	-50.27	2.00	11.60	-42.82	-13.00	H
9474.75	-50.60	2.10	11.60	-43.25	-13.00	V
9722.38	-49.63	2.20	11.20	-42.78	-13.00	H
9792.88	-50.49	2.30	11.20	-43.74	-13.00	V

Note: The maximum value of expanded measurement uncertainty for this test item is U = 2.87dB(30MHz-3GHz)/3.35dB(3GHz-18GHz)/2.68dB(18GHz-40GHz), k = 2



**LTE Band 26(814MHz-824MHz), 1.4MHz, QPSK, Channel 26783**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
8761.13	-52.48	1.90	12.00	-44.53	-13.00	H
9101.50	-51.20	2.20	11.60	-43.95	-13.00	H
9299.50	-50.17	2.00	11.60	-42.72	-13.00	H
9473.25	-50.06	2.10	11.60	-42.71	-13.00	V
9750.63	-50.82	2.20	11.20	-43.97	-13.00	H
9933.63	-51.28	2.20	11.20	-44.43	-13.00	V

**LTE Band 26(814MHz-824MHz), 1.4MHz, QPSK, Channel 26740**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
8484.75	-52.17	1.80	11.30	-44.82	-13.00	H
9098.13	-50.94	2.20	11.60	-43.69	-13.00	H
9298.75	-50.04	2.00	11.60	-42.59	-13.00	H
9474.38	-51.27	2.10	11.60	-43.92	-13.00	V
9744.50	-50.71	2.20	11.20	-43.86	-13.00	H
9799.13	-51.07	2.30	11.20	-44.32	-13.00	H

**LTE Band 26(814MHz-824MHz), 1.4MHz, QPSK, Channel 26697**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
8419.50	-52.22	1.80	12.00	-44.42	-44.87	-13.00
9100.38	-50.99	2.20	11.60	-44.32	-43.74	-13.00
9295.50	-50.16	2.00	11.60	-42.91	-42.71	-13.00
9473.63	-50.65	2.10	11.60	-43.54	-43.30	-13.00
9733.75	-51.14	2.20	11.20	-43.81	-44.29	-13.00
9794.38	-50.68	2.30	11.20	-44.32	-43.93	-13.00

**LTE Band 26(814MHz-824MHz), 1.4MHz, 16QAM, Channel 26783**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
7256.25	-52.55	1.90	12.00	-44.60	-13.00	H
8370.00	-51.55	1.80	11.60	-44.20	-13.00	H
9098.38	-51.65	2.20	11.60	-44.40	-13.00	H
9300.50	-50.47	2.00	11.60	-43.02	-13.00	H
9474.38	-50.82	2.10	11.20	-43.47	-13.00	V
9738.00	-51.16	2.20	11.20	-44.31	-13.00	H

**LTE Band 26(814MHz-824MHz), 1.4MHz, 16QAM, Channel 26740**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
7198.13	-52.64	1.80	12.00	-44.59	-13.00	V
9100.00	-51.69	2.20	11.60	-44.44	-13.00	H
9304.00	-49.87	2.00	11.60	-42.42	-13.00	H
9476.63	-50.45	2.10	11.60	-43.10	-13.00	V
9675.38	-50.66	2.20	11.20	-43.81	-13.00	H
9779.25	-51.08	2.30	11.20	-44.33	-13.00	H

**LTE Band 26(814MHz-824MHz), 1.4MHz, 16QAM, Channel 26697**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
8786.63	-52.19	1.90	11.30	-44.24	-13.00	H
9100.38	-51.63	2.20	11.60	-44.38	-13.00	H
9307.25	-50.93	2.00	11.60	-43.48	-13.00	H
9476.75	-50.61	2.10	11.60	-43.26	-13.00	V
9736.50	-50.52	2.20	11.20	-43.67	-13.00	H
9782.38	-50.92	2.30	11.20	-44.17	-13.00	H



**LTE Band 26(814MHz-824MHz), 1.4MHz, 64QAM, Channel 26783**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
2466.00	-50.95	0.90	9.80	-44.20	-13.00	V
9106.63	-51.32	2.10	11.60	-43.97	-13.00	H
9294.88	-50.68	2.00	11.60	-43.23	-13.00	H
9474.63	-50.99	2.10	11.60	-43.64	-13.00	V
9715.63	-50.87	2.20	11.20	-44.02	-13.00	H
9828.00	-50.48	2.30	11.20	-43.73	-13.00	H

**LTE Band 26(814MHz-824MHz), 1.4MHz, 64QAM, Channel 26740**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
8448.00	-51.64	1.80	11.30	-44.29	-13.00	H
9105.50	-51.60	2.20	11.60	-44.35	-13.00	H
9305.50	-50.44	2.00	11.60	-42.99	-13.00	H
9419.13	-50.98	2.10	11.60	-43.63	-13.00	H
9749.63	-50.22	2.20	11.20	-43.37	-13.00	H
9790.25	-50.20	2.30	11.20	-43.45	-13.00	H

**LTE Band 26(814MHz-824MHz), 1.4MHz, 64QAM, Channel 26697**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
8473.50	-51.73	1.80	11.30	-44.38	-13.00	H
9105.25	-51.60	2.20	11.60	-44.35	-13.00	H
9225.13	-50.22	2.10	11.60	-42.87	-13.00	H
9473.25	-50.26	2.10	11.60	-42.91	-13.00	V
9728.00	-50.80	2.20	11.20	-43.95	-13.00	H
9787.50	-51.35	2.30	11.20	-44.60	-13.00	H

Note: The maximum value of expanded measurement uncertainty for this test item is  $U = 4.92\text{dB}(30\text{MHz}-3\text{GHz})/4.88\text{dB}(3\text{GHz}-18\text{GHz})/5.66\text{dB}(18\text{GHz}-40\text{GHz})$ ,  $k = 2$



**LTE band 26(824MHz-849MHz), 1.4MHz, QPSK, Channel 27033**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak ERP(dBm)	Limit(dBm)	Polarization
8749.13	-51.81	2.00	12.00	-43.96	-13.00	H
9100.38	-51.49	2.20	11.60	-44.24	-13.00	H
9299.88	-50.46	2.00	11.60	-43.01	-13.00	H
9474.63	-51.34	2.10	11.60	-43.99	-13.00	V
9726.13	-50.13	2.20	11.20	-43.28	-13.00	H
9789.25	-51.18	2.30	11.20	-44.43	-13.00	H

**LTE band 26(824MHz-849MHz), 1.4MHz, QPSK, Channel 26915**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak ERP(dBm)	Limit(dBm)	Polarization
7959.00	-52.05	1.90	11.30	-44.80	-13.00	H
9110.50	-51.63	2.10	11.60	-44.28	-13.00	H
9300.63	-49.78	2.00	11.60	-42.33	-13.00	H
9474.50	-50.77	2.10	11.60	-43.42	-13.00	V
9739.25	-50.29	2.20	11.20	-43.44	-13.00	H
9784.13	-50.21	2.30	11.20	-43.46	-13.00	H

**LTE band 26(824MHz-849MHz), 1.4MHz, QPSK, Channel 26797**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak ERP(dBm)	Limit(dBm)	Polarization
8718.38	-52.27	2.00	12.00	-44.42	-13.00	V
9101.88	-51.57	2.20	11.60	-44.32	-13.00	H
9218.88	-50.26	2.10	11.60	-42.91	-13.00	H
9477.00	-50.89	2.10	11.60	-43.54	-13.00	V
9734.63	-50.66	2.20	11.20	-43.81	-13.00	H
9797.38	-51.07	2.30	11.20	-44.32	-13.00	H



**LTE band 26(824MHz-849MHz), 1.4MHz, 16QAM, Channel 27033**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak ERP(dBm)	Limit(dBm)	Polarization
7196.25	-52.88	1.80	12.00	-44.83	-13.00	V
9099.63	-51.45	2.20	11.60	-44.20	-13.00	H
9306.25	-51.00	2.00	11.60	-43.55	-13.00	H
9475.00	-50.78	2.10	11.60	-43.43	-13.00	V
9722.38	-50.94	2.20	11.20	-44.09	-13.00	H
9789.25	-50.80	2.30	11.20	-44.05	-13.00	H

**LTE band 26(824MHz-849MHz), 1.4MHz, 16QAM, Channel 26915**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak ERP(dBm)	Limit(dBm)	Polarization
8586.75	-52.51	2.00	12.00	-44.66	-13.00	H
9092.38	-51.69	2.20	11.60	-44.44	-13.00	H
9222.25	-50.22	2.10	11.60	-42.87	-13.00	H
9473.75	-51.01	2.10	11.60	-43.66	-13.00	V
9724.25	-50.73	2.20	11.20	-43.88	-13.00	H
9783.63	-50.97	2.30	11.20	-44.22	-13.00	H

**LTE band 26(824MHz-849MHz), 1.4MHz, 16QAM, Channel 26797**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak ERP(dBm)	Limit(dBm)	Polarization
8418.75	-51.96	1.80	11.30	-44.61	-13.00	H
9093.88	-51.48	2.20	11.60	-44.23	-13.00	H
9226.13	-50.29	2.10	11.60	-42.94	-13.00	H
9469.75	-50.40	2.10	11.60	-43.05	-13.00	V
9724.00	-51.01	2.20	11.20	-44.16	-13.00	H
9786.88	-50.95	2.30	11.20	-44.20	-13.00	H



**LTE band 26(824MHz-849MHz), 1.4MHz, 64QAM, Channel 27033**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak ERP(dBm)	Limit(dBm)	Polarization
8389.13	-51.70	1.80	11.30	-44.35	-13.00	V
9102.88	-51.71	2.20	11.60	-44.46	-13.00	H
9301.25	-50.68	2.00	11.60	-43.23	-13.00	H
9467.50	-50.74	2.10	11.60	-43.39	-13.00	V
9751.50	-50.66	2.20	11.20	-43.81	-13.00	H
9819.13	-51.03	2.30	11.20	-44.28	-13.00	V

**LTE band 26(824MHz-849MHz), 1.4MHz, 64QAM, Channel 26915**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak ERP(dBm)	Limit(dBm)	Polarization
8524.50	-52.12	2.10	12.00	-44.37	-13.00	H
9098.63	-50.56	2.20	11.60	-43.31	-13.00	H
9296.25	-50.25	2.00	11.60	-42.80	-13.00	H
9419.00	-50.67	2.10	11.60	-43.32	-13.00	H
9737.00	-50.87	2.20	11.20	-44.02	-13.00	H
9792.63	-51.32	2.30	11.20	-44.57	-13.00	H

**LTE band 26(824MHz-849MHz), 1.4MHz, 64QAM, Channel 26797**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak ERP(dBm)	Limit(dBm)	Polarization
8469.38	-52.27	1.80	11.30	-44.92	-13.00	H
9096.88	-51.21	2.20	11.60	-43.96	-13.00	H
9304.38	-50.02	2.00	11.60	-42.57	-13.00	H
9475.88	-50.58	2.10	11.60	-43.23	-13.00	V
9764.75	-50.74	2.30	11.20	-43.99	-13.00	H
9880.50	-50.83	2.20	11.20	-43.98	-13.00	H

Note: The maximum value of expanded measurement uncertainty for this test item is  $U = 2.87\text{dB}(30\text{MHz}-3\text{GHz})/3.35\text{dB}(3\text{GHz}-18\text{GHz})/2.68\text{dB}(18\text{GHz}-40\text{GHz})$ ,  $k = 2$



**LTE Band 41, 5MHz, QPSK, Channel 40065**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16961.90	-55.02	2.90	16.50	-41.42	-25.00	H
17134.76	-53.65	2.90	14.50	-42.05	-25.00	H
17273.33	-53.23	3.20	14.50	-41.93	-25.00	H
17523.33	-49.64	2.90	12.80	-39.74	-25.00	H
17603.33	-49.83	3.30	12.80	-40.33	-25.00	H
17833.33	-50.07	3.60	12.80	-40.87	-25.00	H

**LTE Band 41, 5MHz, QPSK, Channel 40640**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16995.24	-55.25	2.90	16.50	-41.65	-25.00	H
17295.71	-53.26	3.20	14.50	-41.96	-25.00	H
17457.14	-51.24	2.90	14.50	-39.64	-25.00	H
17585.24	-49.54	3.30	12.80	-40.04	-25.00	H
17840.00	-50.07	3.60	12.80	-40.87	-25.00	H
17930.00	-47.87	3.20	12.80	-38.27	-25.00	H

**LTE Band 41, 5MHz, QPSK, Channel 41215**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16944.76	-55.27	2.90	16.50	-41.67	-25.00	H
17299.05	-53.25	3.20	14.50	-41.95	-25.00	H
17522.86	-50.16	2.90	12.80	-40.26	-25.00	H
17592.38	-49.56	3.30	12.80	-40.06	-25.00	H
17838.57	-49.96	3.60	12.80	-40.76	-25.00	H
17964.29	-47.99	3.20	12.80	-38.39	-25.00	H



**LTE Band 41, 5MHz, 16QAM, Channel 40065**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16984.29	-55.09	2.90	16.50	-41.49	-25.00	H
17295.24	-53.20	3.20	14.50	-41.90	-25.00	H
17483.81	-51.88	2.90	14.50	-40.28	-25.00	H
17622.38	-49.30	3.30	12.80	-39.80	-25.00	H
17840.00	-49.83	3.60	12.80	-40.63	-25.00	H
17978.10	-47.76	3.20	12.80	-38.16	-25.00	H

**LTE Band 41, 5MHz, 16QAM, Channel 40640**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16976.67	-55.15	2.90	16.50	-41.55	-25.00	H
17299.05	-53.10	3.20	14.50	-41.80	-25.00	H
17460.95	-51.78	2.90	14.50	-40.18	-25.00	H
17528.10	-50.14	2.90	12.80	-40.24	-25.00	H
17767.14	-49.80	3.60	12.80	-40.60	-25.00	H
17955.71	-47.86	3.20	12.80	-38.26	-25.00	H

**LTE Band 41, 5MHz, 16QAM, Channel 41215**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16986.19	-55.03	2.90	16.50	-41.43	-25.00	H
17353.33	-53.36	3.20	14.50	-42.06	-25.00	H
17520.00	-49.94	2.90	12.80	-40.04	-25.00	H
17526.19	-49.59	2.90	12.80	-39.69	-25.00	H
17780.00	-49.82	3.60	12.80	-40.62	-25.00	H
17931.90	-47.75	3.20	12.80	-38.15	-25.00	H





**LTE Band 41, 5MHz, 64QAM, Channel 40065**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16947.62	-55.08	2.90	16.50	-41.48	-25.00	H
17291.90	-53.22	3.20	14.50	-41.92	-25.00	H
17520.95	-50.06	2.90	12.80	-40.16	-25.00	H
17615.71	-49.50	3.30	12.80	-40.00	-25.00	H
17838.57	-49.83	3.60	12.80	-40.63	-25.00	H
17990.48	-47.58	3.20	12.80	-37.98	-25.00	H

**LTE Band 41, 5MHz, 64QAM, Channel 40640**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16956.19	-55.33	2.90	16.50	-41.73	-25.00	H
17285.24	-53.33	3.20	14.50	-42.03	-25.00	H
17460.00	-51.32	2.90	14.50	-39.72	-25.00	H
17579.05	-49.40	3.30	12.80	-39.90	-25.00	H
17840.00	-49.75	3.60	12.80	-40.55	-25.00	H
17948.10	-47.71	3.20	12.80	-38.11	-25.00	H

**LTE Band 41, 5MHz, 64QAM, Channel 41215**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16951.90	-55.06	2.90	16.50	-41.46	-25.00	H
17360.95	-53.43	3.20	14.50	-42.13	-25.00	H
17501.90	-50.22	2.90	12.80	-40.32	-25.00	H
17598.10	-49.77	3.30	12.80	-40.27	-25.00	H
17838.57	-49.74	3.60	12.80	-40.54	-25.00	H
17977.62	-47.75	3.20	12.80	-38.15	-25.00	H

Note: The maximum value of expanded measurement uncertainty for this test item is  $U = 2.87\text{dB}(30\text{MHz}-3\text{GHz})/3.35\text{dB}(3\text{GHz}-18\text{GHz})/2.68\text{dB}(18\text{GHz}-40\text{GHz})$ ,  $k = 2$



**LTE Band 66, 1.4MHz QPSK, Channel 131979**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16942.86	-45.81	2.90	16.50	-32.21	-13.00	H
17349.52	-43.16	3.20	14.50	-31.86	-13.00	H
17466.19	-42.27	2.90	14.50	-30.67	-13.00	H
17600.95	-39.35	3.30	12.80	-29.85	-13.00	H
17792.86	-40.33	3.60	12.80	-31.13	-13.00	H
17930.00	-37.61	3.20	12.80	-28.01	-13.00	H

**LTE Band 66, 1.4MHz, QPSK, Channel 132322**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16946.19	-45.42	2.90	16.50	-31.82	-13.00	H
17256.67	-43.19	3.20	14.50	-31.89	-13.00	H
17501.43	-39.96	2.90	12.80	-30.06	-13.00	H
17610.95	-40.00	3.30	12.80	-30.50	-13.00	H
17830.95	-39.81	3.60	12.80	-30.61	-13.00	H
17996.19	-38.12	3.20	12.80	-28.52	-13.00	H

**LTE Band 66, 1.4MHz, QPSK, Channel 132665**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16930.48	-45.70	2.90	16.50	-32.10	-13.00	H
17163.33	-44.10	2.90	14.50	-32.50	-13.00	H
17518.10	-40.77	2.90	12.80	-30.87	-13.00	H
17547.62	-40.64	2.90	12.80	-30.74	-13.00	H
17805.71	-40.11	3.60	12.80	-30.91	-13.00	H
17968.57	-38.44	3.20	12.80	-28.84	-13.00	H

**LTE Band 66, 1.4MHz, 16QAM, Channel 131979**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16992.86	-45.51	2.90	16.50	-31.91	-13.00	H
17285.71	-43.54	3.20	14.50	-32.24	-13.00	H
17461.43	-42.86	2.90	14.50	-31.26	-13.00	H
17531.43	-40.74	2.90	12.80	-30.84	-13.00	H
17775.24	-39.57	3.60	12.80	-30.37	-13.00	H
17991.90	-38.27	3.20	12.80	-28.67	-13.00	H

**LTE Band 66, 1.4MHz, 16QAM, Channel 132322**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
17123.33	-43.57	2.90	14.50	-31.97	-13.00	H
17326.19	-44.03	3.20	14.50	-32.73	-13.00	H
17449.52	-41.96	2.90	14.50	-30.36	-13.00	H
17628.57	-39.93	3.30	12.80	-30.43	-13.00	H
17823.33	-40.05	3.60	12.80	-30.85	-13.00	H
17991.90	-37.92	3.20	12.80	-28.32	-13.00	H

**LTE Band 66, 1.4MHz, 16QAM, Channel 132665**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16980.00	-45.06	2.90	16.50	-31.46	-13.00	H
17238.57	-43.16	3.20	14.50	-31.86	-13.00	H
17420.00	-42.54	2.90	14.50	-30.94	-13.00	H
17526.19	-40.19	2.90	12.80	-30.29	-13.00	H
17809.05	-40.27	3.60	12.80	-31.07	-13.00	H
17966.67	-38.44	3.20	12.80	-28.84	-13.00	H



**LTE Band 66, 1.4MHz, 64QAM, Channel 131979**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
17186.19	-43.22	2.90	14.50	-31.62	-13.00	H
17250.95	-42.98	3.20	14.50	-31.68	-13.00	H
17431.90	-42.34	2.90	14.50	-30.74	-13.00	H
17528.57	-40.44	2.90	12.80	-30.54	-13.00	H
17837.62	-40.36	3.60	12.80	-31.16	-13.00	H
17948.57	-37.95	3.20	12.80	-28.35	-13.00	H

**LTE Band 66, 1.4MHz, 64QAM, Channel 132322**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16979.52	-45.46	2.90	16.50	-31.86	-13.00	H
17368.10	-43.25	3.20	14.50	-31.95	-13.00	H
17459.52	-42.03	2.90	14.50	-30.43	-13.00	H
17596.19	-39.75	3.30	12.80	-30.25	-13.00	H
17719.52	-39.99	3.30	12.80	-30.49	-13.00	H
17926.67	-37.15	3.20	12.80	-27.55	-13.00	H

**LTE Band 66, 1.4MHz, 64QAM, Channel 132665**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16945.71	-45.48	2.90	16.50	-31.88	-13.00	H
17353.81	-44.02	3.20	14.50	-32.72	-13.00	H
17513.81	-39.99	2.90	12.80	-30.09	-13.00	H
17599.05	-39.14	3.30	12.80	-29.64	-13.00	H
17777.62	-40.38	3.60	12.80	-31.18	-13.00	H
17997.14	-38.00	3.20	12.80	-28.40	-13.00	H

Note: The maximum value of expanded measurement uncertainty for this test item is  $U = 2.87\text{dB}(30\text{MHz}-3\text{GHz})/3.35\text{dB}(3\text{GHz}-18\text{GHz})/2.68\text{dB}(18\text{GHz}-40\text{GHz})$ ,  $k = 2$

**Lower antenna****LTE Band 2, 1.4MHz, QPSK, Channel 18607**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16947.62	-45.39	2.90	16.50	-31.79	-13.00	H
17227.14	-43.50	3.20	14.50	-32.20	-13.00	H
17471.90	-41.51	2.90	14.50	-29.91	-13.00	H
17596.19	-40.23	3.30	12.80	-30.73	-13.00	H
17827.62	-40.36	3.60	12.80	-31.16	-13.00	H
17990.00	-38.42	3.20	12.80	-28.82	-13.00	H

**LTE Band 2, 1.4MHz, QPSK, Channel 18900**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16935.71	-45.10	2.90	16.50	-31.50	-13.00	H
17299.05	-42.67	3.20	14.50	-31.37	-13.00	H
17476.19	-41.58	2.90	14.50	-29.98	-13.00	H
17572.86	-39.06	3.30	12.80	-29.56	-13.00	H
17822.86	-40.39	3.60	12.80	-31.19	-13.00	H
17972.38	-38.35	3.20	12.80	-28.75	-13.00	H

**LTE Band 2, 1.4MHz, QPSK, Channel 19193**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16951.90	-45.48	2.90	16.50	-31.88	-13.00	H
17358.10	-43.34	3.20	14.50	-32.04	-13.00	H
17452.38	-41.76	2.90	14.50	-30.16	-13.00	H
17592.86	-40.11	3.30	12.80	-30.61	-13.00	H
17835.24	-39.94	3.60	12.80	-30.74	-13.00	H
17973.33	-38.51	3.20	12.80	-28.91	-13.00	H

**LTE Band 2, 1.4MHz, 16QAM, Channel 18607**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16922.38	-45.95	2.90	16.50	-32.35	-13.00	H
17273.33	-43.42	3.20	14.50	-32.12	-13.00	H
17508.10	-41.02	2.90	12.80	-31.12	-13.00	H
17569.52	-39.09	3.30	12.80	-29.59	-13.00	H
17828.10	-39.45	3.60	12.80	-30.25	-13.00	H
17983.81	-37.44	3.20	12.80	-27.84	-13.00	H

**LTE Band 2, 1.4MHz, 16QAM, Channel 18900**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
17000.48	-43.48	2.90	14.50	-31.88	-13.00	H
17115.71	-43.64	2.90	14.50	-32.04	-13.00	H
17497.14	-42.22	2.90	14.50	-30.62	-13.00	H
17541.43	-40.19	2.90	12.80	-30.29	-13.00	H
17830.00	-39.99	3.60	12.80	-30.79	-13.00	H
17945.24	-38.57	3.20	12.80	-28.97	-13.00	H

**LTE Band 2, 1.4MHz, 16QAM, Channel 19193**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16957.14	-45.42	2.90	16.50	-31.82	-13.00	H
17357.62	-42.87	3.20	14.50	-31.57	-13.00	H
17503.81	-40.35	2.90	12.80	-30.45	-13.00	H
17560.00	-39.44	2.90	12.80	-29.54	-13.00	H
17833.33	-40.59	3.60	12.80	-31.39	-13.00	H
17970.95	-36.89	3.20	12.80	-27.29	-13.00	H



**LTE Band 2, 1.4MHz, 64QAM, Channel 18607**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
17054.29	-43.38	2.90	14.50	-31.78	-13.00	H
17230.95	-43.47	3.20	14.50	-32.17	-13.00	H
17458.10	-41.68	2.90	14.50	-30.08	-13.00	H
17596.19	-39.33	3.30	12.80	-29.83	-13.00	H
17818.10	-40.52	3.60	12.80	-31.32	-13.00	H
17981.43	-37.88	3.20	12.80	-28.28	-13.00	H

**LTE Band 2, 1.4MHz, 64QAM, Channel 18900**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16959.05	-45.90	2.90	16.50	-32.30	-13.00	H
17360.48	-43.59	3.20	14.50	-32.29	-13.00	H
17506.67	-40.03	2.90	12.80	-30.13	-13.00	H
17572.86	-39.57	3.30	12.80	-30.07	-13.00	H
17698.10	-39.95	3.30	12.80	-30.45	-13.00	H
17937.14	-38.11	3.20	12.80	-28.51	-13.00	H

**LTE Band 2, 1.4MHz, 64QAM, Channel 19193**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16980.48	-45.10	2.90	16.50	-31.50	-13.00	H
17224.29	-43.38	3.20	14.50	-32.08	-13.00	H
17505.71	-40.05	2.90	12.80	-30.15	-13.00	H
17586.67	-39.13	3.30	12.80	-29.63	-13.00	H
17802.38	-40.41	3.60	12.80	-31.21	-13.00	H
17938.57	-38.38	3.20	12.80	-28.78	-13.00	H

Note: The maximum value of expanded measurement uncertainty for this test item is  $U = 2.87\text{dB}(30\text{MHz}-3\text{GHz})/3.35\text{dB}(3\text{GHz}-18\text{GHz})/2.68\text{dB}(18\text{GHz}-40\text{GHz})$ ,  $k = 2$

**LTE Band 4, 1.4MHz QPSK, Channel 19957**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16960.48	-45.44	2.90	16.50	-31.84	-13.00	H
17335.71	-43.26	3.20	14.50	-31.96	-13.00	H
17455.71	-41.69	2.90	14.50	-30.09	-13.00	H
17533.81	-40.31	2.90	12.80	-30.41	-13.00	H
17770.48	-40.51	3.60	12.80	-31.31	-13.00	H
17930.48	-38.40	3.20	12.80	-28.80	-13.00	H

**LTE Band 4, 1.4MHz, QPSK, Channel 20175**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16959.52	-45.14	2.90	16.50	-31.54	-13.00	H
17169.05	-43.37	2.90	14.50	-31.77	-13.00	H
17465.71	-42.44	2.90	14.50	-30.84	-13.00	H
17569.05	-39.96	3.30	12.80	-30.46	-13.00	H
17769.52	-40.36	3.60	12.80	-31.16	-13.00	H
17964.29	-37.56	3.20	12.80	-27.96	-13.00	H

**LTE Band 4, 1.4MHz, QPSK, Channel 20393**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16927.14	-44.82	2.90	16.50	-31.22	-13.00	H
17257.62	-43.59	3.20	14.50	-32.29	-13.00	H
17515.24	-39.93	2.90	12.80	-30.03	-13.00	H
17526.67	-41.10	2.90	12.80	-31.20	-13.00	H
17783.33	-39.93	3.60	12.80	-30.73	-13.00	H
17997.62	-37.47	3.20	12.80	-27.87	-13.00	H





**LTE Band 4, 1.4MHz, 16QAM, Channel 19957**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16940.00	-45.10	2.90	16.50	-31.50	-13.00	H
17211.90	-43.44	2.90	14.50	-31.84	-13.00	H
17429.05	-42.17	2.90	14.50	-30.57	-13.00	H
17590.48	-39.34	3.30	12.80	-29.84	-13.00	H
17780.00	-40.51	3.60	12.80	-31.31	-13.00	H
17998.57	-38.44	3.20	12.80	-28.84	-13.00	H

**LTE Band 4, 1.4MHz, 16QAM, Channel 20175**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16978.57	-45.28	2.90	16.50	-31.68	-13.00	H
17098.10	-43.96	2.90	14.50	-32.36	-13.00	H
17489.05	-42.32	2.90	14.50	-30.72	-13.00	H
17574.76	-39.97	3.30	12.80	-30.47	-13.00	H
17835.24	-39.58	3.60	12.80	-30.38	-13.00	H
17911.43	-37.74	3.60	12.80	-28.54	-13.00	H

**LTE Band 4, 1.4MHz, 16QAM, Channel 20393**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16946.19	-45.82	2.90	16.50	-32.22	-13.00	H
17091.43	-43.16	2.90	14.50	-31.56	-13.00	H
17437.14	-41.75	2.90	14.50	-30.15	-13.00	H
17526.67	-40.40	2.90	12.80	-30.50	-13.00	H
17773.33	-39.87	3.60	12.80	-30.67	-13.00	H
17977.62	-37.46	3.20	12.80	-27.86	-13.00	H



**LTE Band 4, 1.4MHz, 64QAM, Channel 19957**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16994.76	-45.11	2.90	16.50	-31.51	-13.00	H
17299.52	-43.76	3.20	14.50	-32.46	-13.00	H
17487.62	-42.53	2.90	14.50	-30.93	-13.00	H
17601.43	-39.61	3.30	12.80	-30.11	-13.00	H
17689.52	-40.56	3.30	12.80	-31.06	-13.00	H
17969.05	-38.06	3.20	12.80	-28.46	-13.00	H

**LTE Band 4, 1.4MHz, 64QAM, Channel 20175**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
17090.95	-43.46	2.90	14.50	-31.86	-13.00	H
17359.05	-43.32	3.20	14.50	-32.02	-13.00	H
17499.05	-41.51	2.90	14.50	-29.91	-13.00	H
17592.38	-39.56	3.30	12.80	-30.06	-13.00	H
17806.67	-39.55	3.60	12.80	-30.35	-13.00	H
17940.95	-37.89	3.20	12.80	-28.29	-13.00	H

**LTE Band 4, 1.4MHz, 64QAM, Channel 20393**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16970.95	-45.54	2.90	16.50	-31.94	-13.00	H
17150.48	-43.72	2.90	14.50	-32.12	-13.00	H
17464.76	-41.68	2.90	14.50	-30.08	-13.00	H
17590.48	-40.58	3.30	12.80	-31.08	-13.00	H
17830.00	-40.24	3.60	12.80	-31.04	-13.00	H
17986.19	-38.42	3.20	12.80	-28.82	-13.00	H

Note: The maximum value of expanded measurement uncertainty for this test item is  $U = 2.87\text{dB}(30\text{MHz}-3\text{GHz})/3.35\text{dB}(3\text{GHz}-18\text{GHz})/2.68\text{dB}(18\text{GHz}-40\text{GHz})$ ,  $k = 2$

**LTE Band 7, 5 MHz, QPSK, Channel 20775**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16981.43	-55.14	2.90	16.50	-41.54	-25.00	H
17368.10	-52.95	3.20	14.50	-41.65	-25.00	H
17516.67	-49.96	2.90	12.80	-40.06	-25.00	H
17526.19	-49.69	2.90	12.80	-39.79	-25.00	H
17831.43	-49.92	3.60	12.80	-40.72	-25.00	H
17958.10	-47.60	3.20	12.80	-38.00	-25.00	H

**LTE Band 7, 5 MHz, QPSK, Channel 21100**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16955.24	-54.98	2.90	16.50	-41.38	-25.00	H
17285.24	-53.11	3.20	14.50	-41.81	-25.00	H
17522.86	-49.57	2.90	12.80	-39.67	-25.00	H
17605.24	-49.36	3.30	12.80	-39.86	-25.00	H
17839.52	-49.80	3.60	12.80	-40.60	-25.00	H
17990.48	-47.49	3.20	12.80	-37.89	-25.00	H

**LTE Band 7, 5 MHz, QPSK, Channel 21425**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16980.00	-54.01	2.90	16.50	-40.41	-25.00	H
17368.10	-52.72	3.20	14.50	-41.42	-25.00	H
17508.10	-50.11	2.90	12.80	-40.21	-25.00	H
17620.48	-49.36	3.30	12.80	-39.86	-25.00	H
17837.14	-49.61	3.60	12.80	-40.41	-25.00	H
17988.57	-47.49	3.20	12.80	-37.89	-25.00	H

**LTE Band 7, 5 MHz, 16QAM, Channel 20775**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16953.81	-55.15	2.90	16.50	-41.55	-25.00	H
17277.62	-52.89	3.20	14.50	-41.59	-25.00	H
17451.90	-51.67	2.90	14.50	-40.07	-25.00	H
17525.24	-49.36	2.90	12.80	-39.46	-25.00	H
17840.00	-49.82	3.60	12.80	-40.62	-25.00	H
17996.67	-47.69	3.20	12.80	-38.09	-25.00	H

**LTE Band 7, 5 MHz, 16QAM, Channel 21100**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16934.29	-54.97	2.90	16.50	-41.37	-25.00	H
17296.19	-52.77	3.20	14.50	-41.47	-25.00	H
17453.33	-51.69	2.90	14.50	-40.09	-25.00	H
17617.14	-49.45	3.30	12.80	-39.95	-25.00	H
17840.00	-49.69	3.60	12.80	-40.49	-25.00	H
17978.10	-47.67	3.20	12.80	-38.07	-25.00	H

**LTE Band 7, 5 MHz, 16QAM, Channel 21425**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16933.81	-54.88	2.90	16.50	-41.28	-25.00	H
17276.19	-52.73	3.20	14.50	-41.43	-25.00	H
17517.14	-49.87	2.90	12.80	-39.97	-25.00	H
17597.62	-49.56	3.30	12.80	-40.06	-25.00	H
17836.19	-49.79	3.60	12.80	-40.59	-25.00	H
17922.86	-47.61	3.20	12.80	-38.01	-25.00	H



**LTE Band 7, 5 MHz, 64QAM, Channel 20775**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16998.10	-54.78	2.90	16.50	-41.18	-25.00	H
17343.33	-52.77	3.20	14.50	-41.47	-25.00	H
17512.86	-50.13	2.90	12.80	-40.23	-25.00	H
17623.33	-49.37	3.30	12.80	-39.87	-25.00	H
17838.10	-49.59	3.60	12.80	-40.39	-25.00	H
17997.14	-47.56	3.20	12.80	-37.96	-25.00	H

**LTE Band 7, 5 MHz, 64QAM, Channel 21100**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16947.14	-54.88	2.90	16.50	-41.28	-25.00	H
17280.48	-53.03	3.20	14.50	-41.73	-25.00	H
17509.05	-50.05	2.90	12.80	-40.15	-25.00	H
17578.10	-49.46	3.30	12.80	-39.96	-25.00	H
17835.71	-49.53	3.60	12.80	-40.33	-25.00	H
17983.81	-47.50	3.20	12.80	-37.90	-25.00	H

**LTE Band 7, 5 MHz, 64QAM, Channel 21425**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16973.33	-54.89	2.90	16.50	-41.29	-25.00	H
17276.19	-52.79	3.20	14.50	-41.49	-25.00	H
17456.19	-51.39	2.90	14.50	-39.79	-25.00	H
17583.33	-49.63	3.30	12.80	-40.13	-25.00	H
17839.52	-49.35	3.60	12.80	-40.15	-25.00	H
17983.81	-47.78	3.20	12.80	-38.18	-25.00	H

Note: The maximum value of expanded measurement uncertainty for this test item is U = 2.87dB(30MHz-3GHz)/3.35dB(3GHz-18GHz)/2.68dB(18GHz-40GHz), k = 2



**LTE Band 12, 1.4MHz, QPSK, Channel 23017**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak ERP(dBm)	Limit(dBm)	Polarization
7323.75	-53.23	1.70	12.00	-45.08	-13.00	H
9096.13	-51.36	2.20	11.60	-44.11	-13.00	H
9289.00	-49.94	2.10	11.60	-42.59	-13.00	H
9477.75	-50.97	2.10	11.60	-43.62	-13.00	V
9753.50	-50.22	2.20	11.20	-43.37	-13.00	H
9805.25	-51.33	2.30	11.20	-44.58	-13.00	H

**LTE Band 12, 1.4MHz, QPSK, Channel 23095**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak ERP(dBm)	Limit(dBm)	Polarization
8462.25	-51.43	1.80	11.30	-44.08	-13.00	H
9103.00	-51.36	2.20	11.60	-44.11	-13.00	H
9291.25	-50.46	2.00	11.60	-43.01	-13.00	H
9476.75	-50.85	2.10	11.60	-43.50	-13.00	V
9734.63	-50.89	2.20	11.20	-44.04	-13.00	H
9796.75	-51.42	2.30	11.20	-44.67	-13.00	H

**LTE Band 12, 1.4MHz, QPSK, Channel 23173**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak ERP(dBm)	Limit(dBm)	Polarization
7334.25	-52.72	1.70	12.00	-44.57	-13.00	V
7862.25	-52.07	1.70	11.30	-44.62	-13.00	H
9096.63	-51.48	2.20	11.60	-44.23	-13.00	H
9307.63	-50.50	2.00	11.60	-43.05	-13.00	H
9475.88	-50.28	2.10	11.60	-42.93	-13.00	V
9736.25	-50.94	2.20	11.20	-44.09	-13.00	H



**LTE Band 12, 1.4MHz, 16QAM, Channel 23017**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak ERP(dBm)	Limit(dBm)	Polarization
8844.00	-53.02	1.90	12.00	-45.07	-13.00	V
9102.88	-51.22	2.20	11.60	-43.97	-13.00	H
9299.13	-50.04	2.00	11.60	-42.59	-13.00	H
9472.13	-50.32	2.10	11.60	-42.97	-13.00	V
9733.25	-50.50	2.20	11.20	-43.65	-13.00	H
9994.88	-51.44	2.20	11.20	-44.59	-13.00	H

**LTE Band 12, 1.4MHz 16QAM, Channel 23095**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak ERP(dBm)	Limit(dBm)	Polarization
7203.00	-53.11	1.80	12.00	-45.06	-13.00	V
9097.38	-50.87	2.20	11.60	-43.62	-13.00	H
9300.25	-49.63	2.00	11.60	-42.18	-13.00	H
9475.00	-50.43	2.10	11.60	-43.08	-13.00	V
9747.13	-50.68	2.20	11.20	-43.83	-13.00	H
9804.50	-50.94	2.30	11.20	-44.19	-13.00	H

**LTE Band 12, 1.4MHz, 16QAM, Channel 23173**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak ERP(dBm)	Limit(dBm)	Polarization
7206.00	-52.94	1.80	12.00	-44.89	-13.00	H
9101.50	-51.29	2.20	11.60	-44.04	-13.00	H
9301.88	-50.40	2.00	11.60	-42.95	-13.00	H
9476.63	-51.39	2.10	11.60	-44.04	-13.00	V
9731.13	-51.02	2.20	11.20	-44.17	-13.00	H
9796.13	-50.28	2.30	11.20	-43.53	-13.00	H



**LTE Band 12, 1.4MHz, 64QAM, Channel 23017**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak ERP(dBm)	Limit(dBm)	Polarization
7209.00	-52.63	1.80	12.00	-44.58	-13.00	V
9098.63	-51.75	2.20	11.60	-44.50	-13.00	H
9297.25	-49.64	2.00	11.60	-42.19	-13.00	H
9475.25	-50.99	2.10	11.60	-43.64	-13.00	V
9738.63	-50.82	2.20	11.20	-43.97	-13.00	H
9799.88	-51.34	2.30	11.20	-44.59	-13.00	H

**LTE Band 12, 1.4MHz 64QAM, Channel 23095**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak ERP(dBm)	Limit(dBm)	Polarization
8482.50	-51.56	1.80	11.30	-44.21	-13.00	H
9102.50	-51.59	2.20	11.60	-44.34	-13.00	H
9220.88	-50.46	2.10	11.60	-43.11	-13.00	H
9424.38	-50.58	2.10	11.60	-43.23	-13.00	H
9750.50	-50.86	2.20	11.20	-44.01	-13.00	H
9796.75	-51.19	2.30	11.20	-44.44	-13.00	H

**LTE Band 12, 1.4MHz, 64QAM, Channel 23173**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak ERP(dBm)	Limit(dBm)	Polarization
8453.63	-52.38	1.80	11.30	-45.03	-13.00	H
9110.25	-51.26	2.10	11.60	-43.91	-13.00	H
9303.63	-49.97	2.00	11.60	-42.52	-13.00	H
9475.38	-50.87	2.10	11.60	-43.52	-13.00	V
9748.75	-50.74	2.20	11.20	-43.89	-13.00	H
9791.75	-50.78	2.30	11.20	-44.03	-13.00	H

Note: The maximum value of expanded measurement uncertainty for this test item is U = 2.87dB(30MHz-3GHz)/3.35dB(3GHz-18GHz)/2.68dB(18GHz-40GHz), k = 2



**LTE Band 26(814MHz-824MHz), 1.4MHz, QPSK, Channel 26783**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
7317.75	-52.59	1.70	12.00	-44.44	-13.00	H
9089.00	-51.74	2.20	11.60	-44.49	-13.00	H
9303.38	-50.91	2.00	11.60	-43.46	-13.00	H
9474.25	-50.65	2.10	11.60	-43.30	-13.00	V
9728.75	-50.76	2.20	11.20	-43.91	-13.00	H
9797.63	-50.62	2.30	11.20	-43.87	-13.00	H

**LTE Band 26(814MHz-824MHz), 1.4MHz, QPSK, Channel 26740**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
7195.13	-53.17	1.80	12.00	-45.12	-13.00	H
9106.25	-51.07	2.20	11.60	-43.82	-13.00	H
9221.25	-49.32	2.10	11.60	-41.97	-13.00	H
9472.63	-50.54	2.10	11.60	-43.19	-13.00	V
9753.75	-51.02	2.20	11.20	-44.17	-13.00	H
9806.38	-51.20	2.30	11.20	-44.45	-13.00	H

**LTE Band 26(814MHz-824MHz), 1.4MHz, QPSK, Channel 26697**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
8465.63	-52.18	1.80	11.30	-44.83	-13.00	H
9094.25	-50.44	2.20	11.60	-43.19	-13.00	H
9302.50	-50.26	2.00	11.60	-42.81	-13.00	H
9474.38	-51.05	2.10	11.60	-43.70	-13.00	V
9719.50	-50.72	2.20	11.20	-43.87	-13.00	H
9790.00	-50.56	2.30	11.20	-43.81	-13.00	H

**LTE Band 26(814MHz-824MHz), 1.4MHz, 16QAM, Channel 26783**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
8426.63	-52.14	1.80	11.30	-44.79	-13.00	H
9098.50	-51.24	2.20	11.60	-43.99	-13.00	H
9302.13	-50.15	2.00	11.60	-42.70	-13.00	H
9478.50	-51.06	2.10	11.60	-43.71	-13.00	V
9730.75	-50.91	2.20	11.20	-44.06	-13.00	H
9784.38	-50.52	2.30	11.20	-43.77	-13.00	H

**LTE Band 26(814MHz-824MHz), 1.4MHz, 16QAM, Channel 26740**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
7180.13	-52.83	1.80	12.00	-44.78	-13.00	H
9104.13	-51.60	2.20	11.60	-44.35	-13.00	H
9294.13	-49.86	2.00	11.60	-42.41	-13.00	H
9476.88	-50.97	2.10	11.60	-43.62	-13.00	V
9740.00	-50.56	2.20	11.20	-43.71	-13.00	H
9777.38	-50.65	2.30	11.20	-43.90	-13.00	H

**LTE Band 26(814MHz-824MHz), 1.4MHz, 16QAM, Channel 26697**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
7951.50	-52.00	1.90	11.30	-44.75	-13.00	H
9109.25	-51.06	2.10	11.60	-43.71	-13.00	H
9303.50	-50.34	2.00	11.60	-42.89	-13.00	H
9424.75	-50.39	2.10	11.60	-43.04	-13.00	H
9720.88	-51.11	2.20	11.20	-44.26	-13.00	H
9786.75	-51.42	2.30	11.20	-44.67	-13.00	H



**LTE Band 26(814MHz-824MHz), 1.4MHz, 64QAM, Channel 26783**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
8739.75	-52.49	2.00	12.00	-44.64	-13.00	H
9097.88	-51.14	2.20	11.60	-43.89	-13.00	H
9306.13	-50.62	2.00	11.60	-43.17	-13.00	H
9474.75	-50.83	2.10	11.60	-43.48	-13.00	V
9748.25	-50.69	2.20	11.20	-43.84	-13.00	H
9780.50	-51.32	2.30	11.20	-44.57	-13.00	H

**LTE Band 26(814MHz-824MHz), 1.4MHz, 64QAM, Channel 26740**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
8473.50	-51.02	1.80	11.30	-43.67	-13.00	H
9098.50	-51.00	2.20	11.60	-43.75	-13.00	H
9298.88	-49.87	2.00	11.60	-42.42	-13.00	H
9473.63	-51.30	2.10	11.60	-43.95	-13.00	V
9733.50	-50.15	2.20	11.20	-43.30	-13.00	H
9791.38	-50.68	2.30	11.20	-43.93	-13.00	H

**LTE Band 26(814MHz-824MHz), 1.4MHz, 64QAM, Channel 26697**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain	Peak ERP(dBm)	Limit (dBm)	Polarization
7228.50	-52.25	1.80	12.00	-44.20	-13.00	V
9099.50	-51.60	2.20	11.60	-44.35	-13.00	H
9302.75	-50.29	2.00	11.60	-42.84	-13.00	H
9471.25	-50.67	2.10	11.60	-43.32	-13.00	V
9718.63	-51.32	2.20	11.20	-44.47	-13.00	H
9956.88	-50.94	2.20	11.20	-44.09	-13.00	V

Note: The maximum value of expanded measurement uncertainty for this test item is  $U = 4.92\text{dB}(30\text{MHz}-3\text{GHz})/4.88\text{dB}(3\text{GHz}-18\text{GHz})/5.66\text{dB}(18\text{GHz}-40\text{GHz}), k = 2$



**LTE band 26(824MHz-849MHz), 1.4MHz, QPSK, Channel 27033**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak ERP(dBm)	Limit(dBm)	Polarization
2465.50	-50.91	0.90	9.80	-44.16	-13.00	V
9093.88	-51.41	2.20	11.60	-44.16	-13.00	H
9223.63	-50.22	2.10	11.60	-42.87	-13.00	H
9337.13	-51.45	2.00	11.60	-44.00	-13.00	V
9725.38	-50.45	2.20	11.20	-43.60	-13.00	H
9803.50	-50.83	2.30	11.20	-44.08	-13.00	H

**LTE band 26(824MHz-849MHz), 1.4MHz, QPSK, Channel 26915**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak ERP(dBm)	Limit(dBm)	Polarization
8649.75	-52.53	2.00	12.00	-44.68	-13.00	H
9097.25	-51.31	2.20	11.60	-44.06	-13.00	H
9216.50	-50.33	2.10	11.60	-42.98	-13.00	H
9474.38	-50.15	2.10	11.60	-42.80	-13.00	V
9719.25	-50.88	2.20	11.20	-44.03	-13.00	H
9790.75	-51.43	2.30	11.20	-44.68	-13.00	H

**LTE band 26(824MHz-849MHz), 1.4MHz, QPSK, Channel 26797**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak ERP(dBm)	Limit(dBm)	Polarization
1500.00	-49.43	0.70	8.10	-44.18	-13.00	H
9103.25	-51.01	2.20	11.60	-43.76	-13.00	H
9299.63	-50.98	2.00	11.60	-43.53	-13.00	H
9471.50	-50.27	2.10	11.60	-42.92	-13.00	V
9735.75	-50.62	2.20	11.20	-43.77	-13.00	H
9806.88	-51.12	2.30	11.20	-44.37	-13.00	H



**LTE band 26(824MHz-849MHz), 1.4MHz, 16QAM, Channel 27033**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak ERP(dBm)	Limit(dBm)	Polarization
8434.13	-52.00	1.80	11.30	-44.65	-13.00	H
9100.13	-51.43	2.20	11.60	-44.18	-13.00	H
9306.13	-50.51	2.00	11.60	-43.06	-13.00	H
9476.88	-50.75	2.10	11.60	-43.40	-13.00	V
9738.75	-50.69	2.20	11.20	-43.84	-13.00	H
9795.38	-50.90	2.30	11.20	-44.15	-13.00	H

**LTE band 26(824MHz-849MHz), 1.4MHz, 16QAM, Channel 26915**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak ERP(dBm)	Limit(dBm)	Polarization
8740.88	-52.55	2.00	12.00	-44.70	-13.00	H
9097.63	-50.81	2.20	11.60	-43.56	-13.00	H
9292.63	-50.80	2.00	11.60	-43.35	-13.00	H
9423.13	-50.41	2.10	11.60	-43.06	-13.00	H
9743.75	-51.10	2.20	11.20	-44.25	-13.00	H
9794.13	-50.34	2.30	11.20	-43.59	-13.00	V

**LTE band 26(824MHz-849MHz), 1.4MHz, 16QAM, Channel 26797**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak ERP(dBm)	Limit(dBm)	Polarization
8655.38	-52.05	2.00	12.00	-44.20	-13.00	H
9097.50	-50.54	2.20	11.60	-43.29	-13.00	H
9299.25	-49.85	2.00	11.60	-42.40	-13.00	H
9476.50	-50.68	2.10	11.60	-43.33	-13.00	V
9723.13	-51.11	2.20	11.20	-44.26	-13.00	H
9796.50	-51.29	2.30	11.20	-44.54	-13.00	H



**LTE band 26(824MHz-849MHz), 1.4MHz, 64QAM, Channel 27033**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak ERP(dBm)	Limit(dBm)	Polarization
8741.25	-52.73	2.00	12.00	-44.88	-13.00	V
9105.63	-50.94	2.20	11.60	-43.69	-13.00	H
9299.00	-49.59	2.00	11.60	-42.14	-13.00	H
9472.13	-50.73	2.10	11.60	-43.38	-13.00	V
9737.75	-51.05	2.20	11.20	-44.20	-13.00	H
9948.13	-51.58	2.20	11.20	-44.73	-13.00	V

**LTE band 26(824MHz-849MHz), 1.4MHz, 64QAM, Channel 26915**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak ERP(dBm)	Limit(dBm)	Polarization
8467.13	-52.13	1.80	11.30	-44.78	-13.00	V
9092.25	-51.19	2.20	11.60	-43.94	-13.00	H
9302.25	-50.56	2.00	11.60	-43.11	-13.00	H
9474.00	-50.90	2.10	11.60	-43.55	-13.00	V
9744.13	-50.72	2.20	11.20	-43.87	-13.00	H
9794.88	-50.28	2.30	11.20	-43.53	-13.00	H

**LTE band 26(824MHz-849MHz), 1.4MHz, 64QAM, Channel 26797**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak ERP(dBm)	Limit(dBm)	Polarization
1500.00	-49.31	0.70	8.10	-44.06	-13.00	H
8460.75	-51.62	1.80	11.30	-44.27	-13.00	H
9301.88	-50.37	2.00	11.60	-42.92	-13.00	H
9378.38	-50.83	2.00	11.60	-43.38	-13.00	V
9742.63	-49.85	2.20	11.20	-43.00	-13.00	H
9801.50	-51.17	2.30	11.20	-44.42	-13.00	H

Note: The maximum value of expanded measurement uncertainty for this test item is  $U = 2.87\text{dB}(30\text{MHz}-3\text{GHz})/3.35\text{dB}(3\text{GHz}-18\text{GHz})/2.68\text{dB}(18\text{GHz}-40\text{GHz})$ ,  $k = 2$



**LTE Band 41, 5MHz, QPSK, Channel 40065**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16962.86	-54.01	2.90	16.50	-40.41	-25.00	H
17294.29	-51.80	3.20	14.50	-40.50	-25.00	H
17410.00	-50.69	2.90	14.50	-39.09	-25.00	H
17570.48	-48.03	3.30	12.80	-38.53	-25.00	H
17818.57	-48.57	3.60	12.80	-39.37	-25.00	H
17934.76	-46.66	3.20	12.80	-37.06	-25.00	H

**LTE Band 41, 5MHz, QPSK, Channel 40640**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16943.33	-53.69	2.90	16.50	-40.09	-25.00	H
17291.90	-51.65	3.20	14.50	-40.35	-25.00	H
17518.10	-48.58	2.90	12.80	-38.68	-25.00	H
17624.76	-47.76	3.30	12.80	-38.26	-25.00	H
17837.62	-47.78	3.60	12.80	-38.58	-25.00	H
17995.24	-46.21	3.20	12.80	-36.61	-25.00	H

**LTE Band 41, 5MHz, QPSK, Channel 41215**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16943.81	-54.36	2.90	16.50	-40.76	-25.00	H
17347.14	-52.15	3.20	14.50	-40.85	-25.00	H
17507.14	-49.44	2.90	12.80	-39.54	-25.00	H
17569.52	-48.56	3.30	12.80	-39.06	-25.00	H
17837.14	-48.85	3.60	12.80	-39.65	-25.00	H
17989.05	-46.68	3.20	12.80	-37.08	-25.00	H



**LTE Band 41, 5MHz, 16QAM, Channel 40065**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16999.52	-55.14	2.90	16.50	-41.54	-25.00	H
17297.14	-53.09	3.20	14.50	-41.79	-25.00	H
17523.81	-49.94	2.90	12.80	-40.04	-25.00	H
17624.29	-49.74	3.30	12.80	-40.24	-25.00	H
17839.05	-49.67	3.60	12.80	-40.47	-25.00	H
17956.67	-47.80	3.20	12.80	-38.20	-25.00	H

**LTE Band 41, 5MHz, 16QAM, Channel 40640**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16954.29	-55.02	2.90	16.50	-41.42	-25.00	H
17367.62	-52.93	3.20	14.50	-41.63	-25.00	H
17459.52	-51.65	2.90	14.50	-40.05	-25.00	H
17588.57	-49.36	3.30	12.80	-39.86	-25.00	H
17840.00	-49.68	3.60	12.80	-40.48	-25.00	H
17955.24	-47.44	3.20	12.80	-37.84	-25.00	H

**LTE Band 41, 5MHz, 16QAM, Channel 41215**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16961.90	-54.50	2.90	16.50	-40.90	-25.00	H
17293.81	-52.43	3.20	14.50	-41.13	-25.00	H
17510.00	-49.62	2.90	12.80	-39.72	-25.00	H
17590.48	-48.80	3.30	12.80	-39.30	-25.00	H
17795.71	-49.29	3.60	12.80	-40.09	-25.00	H
17979.05	-46.78	3.20	12.80	-37.18	-25.00	H





**LTE Band 41, 5MHz, 64QAM, Channel 40065**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16978.10	-54.94	2.90	16.50	-41.34	-25.00	H
17295.71	-53.12	3.20	14.50	-41.82	-25.00	H
17507.62	-49.93	2.90	12.80	-40.03	-25.00	H
17620.00	-49.49	3.30	12.80	-39.99	-25.00	H
17840.00	-49.87	3.60	12.80	-40.67	-25.00	H
17935.71	-47.58	3.20	12.80	-37.98	-25.00	H

**LTE Band 41, 5MHz, 64QAM, Channel 40640**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16942.38	-54.84	2.90	16.50	-41.24	-25.00	H
17271.43	-52.84	3.20	14.50	-41.54	-25.00	H
17456.19	-51.72	2.90	14.50	-40.12	-25.00	H
17624.76	-49.48	3.30	12.80	-39.98	-25.00	H
17840.00	-49.85	3.60	12.80	-40.65	-25.00	H
17994.76	-47.71	3.20	12.80	-38.11	-25.00	H

**LTE Band 41, 5MHz, 64QAM, Channel 41215**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16952.38	-54.72	2.90	16.50	-41.12	-25.00	H
17294.29	-52.80	3.20	14.50	-41.50	-25.00	H
17501.43	-50.07	2.90	12.80	-40.17	-25.00	H
17596.67	-49.47	3.30	12.80	-39.97	-25.00	H
17834.29	-49.57	3.60	12.80	-40.37	-25.00	H
17996.67	-47.89	3.20	12.80	-38.29	-25.00	H

Note: The maximum value of expanded measurement uncertainty for this test item is  $U = 2.87\text{dB}(30\text{MHz}-3\text{GHz})/3.35\text{dB}(3\text{GHz}-18\text{GHz})/2.68\text{dB}(18\text{GHz}-40\text{GHz})$ ,  $k = 2$



**LTE Band 66, 1.4MHz QPSK, Channel 131979**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16961.43	-45.04	2.90	16.50	-31.44	-13.00	H
17361.43	-42.89	3.20	14.50	-31.59	-13.00	H
17457.62	-41.45	2.90	14.50	-29.85	-13.00	H
17528.10	-40.57	2.90	12.80	-30.67	-13.00	H
17771.43	-39.16	3.60	12.80	-29.96	-13.00	H
17954.76	-37.94	3.20	12.80	-28.34	-13.00	H

**LTE Band 66, 1.4MHz, QPSK, Channel 132322**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16966.19	-45.02	2.90	16.50	-31.42	-13.00	H
17360.48	-43.30	3.20	14.50	-32.00	-13.00	H
17451.90	-41.92	2.90	14.50	-30.32	-13.00	H
17627.62	-39.64	3.30	12.80	-30.14	-13.00	H
17810.48	-39.31	3.60	12.80	-30.11	-13.00	H
18000.00	-31.64	3.20	6.20	-28.64	-13.00	H

**LTE Band 66, 1.4MHz, QPSK, Channel 132665**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16976.19	-44.96	2.90	16.50	-31.36	-13.00	H
17349.52	-42.54	3.20	14.50	-31.24	-13.00	H
17432.38	-42.29	2.90	14.50	-30.69	-13.00	H
17585.71	-38.91	3.30	12.80	-29.41	-13.00	H
17839.52	-40.49	3.60	12.80	-31.29	-13.00	H
17993.33	-38.44	3.20	12.80	-28.84	-13.00	H



**LTE Band 66, 1.4MHz, 16QAM, Channel 131979**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16964.76	-45.54	2.90	16.50	-31.94	-13.00	H
17110.48	-43.94	2.90	14.50	-32.34	-13.00	H
17522.38	-40.37	2.90	12.80	-30.47	-13.00	H
17592.38	-39.11	3.30	12.80	-29.61	-13.00	H
17782.38	-40.42	3.60	12.80	-31.22	-13.00	H
17972.86	-38.62	3.20	12.80	-29.02	-13.00	H

**LTE Band 66, 1.4MHz, 16QAM, Channel 132322**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16992.86	-45.58	2.90	16.50	-31.98	-13.00	H
17307.62	-42.72	3.20	14.50	-31.42	-13.00	H
17432.38	-42.20	2.90	14.50	-30.60	-13.00	H
17628.57	-40.08	3.30	12.80	-30.58	-13.00	H
17781.43	-40.70	3.60	12.80	-31.50	-13.00	H
17983.81	-38.03	3.20	12.80	-28.43	-13.00	H

**LTE Band 66, 1.4MHz, 16QAM, Channel 132665**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16987.14	-44.99	2.90	16.50	-31.39	-13.00	H
17117.62	-43.45	2.90	14.50	-31.85	-13.00	H
17517.62	-40.58	2.90	12.80	-30.68	-13.00	H
17599.05	-39.62	3.30	12.80	-30.12	-13.00	H
17773.81	-40.56	3.60	12.80	-31.36	-13.00	H
17940.48	-38.31	3.20	12.80	-28.71	-13.00	H



**LTE Band 66, 1.4MHz, 64QAM, Channel 131979**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16936.19	-45.82	2.90	16.50	-32.22	-13.00	H
17256.19	-43.30	3.20	14.50	-32.00	-13.00	H
17510.95	-40.73	2.90	12.80	-30.83	-13.00	H
17595.71	-40.24	3.30	12.80	-30.74	-13.00	H
17821.90	-39.97	3.60	12.80	-30.77	-13.00	H
17966.19	-38.08	3.20	12.80	-28.48	-13.00	H

**LTE Band 66, 1.4MHz, 64QAM, Channel 132322**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
16957.62	-45.37	2.90	16.50	-31.77	-13.00	H
17299.52	-43.20	3.20	14.50	-31.90	-13.00	H
17489.05	-41.81	2.90	14.50	-30.21	-13.00	H
17594.29	-40.15	3.30	12.80	-30.65	-13.00	H
17831.43	-40.56	3.60	12.80	-31.36	-13.00	H
17998.57	-37.52	3.20	12.80	-27.92	-13.00	H

**LTE Band 66, 1.4MHz, 64QAM, Channel 132665**

Frequency(MHz)	P <sub>Mea</sub> (dBm)	Path Loss	Antenna Gain(dBi)	Peak EIRP(dBm)	Limit(dBm)	Polarization
17095.71	-42.95	2.90	14.50	-31.35	-13.00	H
17337.14	-43.47	3.20	14.50	-32.17	-13.00	H
17476.19	-42.14	2.90	14.50	-30.54	-13.00	H
17549.52	-40.20	2.90	12.80	-30.30	-13.00	H
17792.86	-40.52	3.60	12.80	-31.32	-13.00	H
17991.90	-38.27	3.20	12.80	-28.67	-13.00	H

Note: The maximum value of expanded measurement uncertainty for this test item is U = 2.87dB(30MHz-3GHz)/3.35dB(3GHz-18GHz)/2.68dB(18GHz-40GHz), k = 2



### **A.3 FREQUENCY STABILITY**

#### **Reference**

FCC: CFR Part 2.1055, 22.355, 24.235, 27.54, 90.213.

#### **A.3.1 Method of Measurement**

In order to measure the carrier frequency under the condition of AFC lock, it is necessary to make measurements with the EUT in a "call mode". This is accomplished with the use of R&S CMW500 DIGITAL RADIO COMMUNICATION TESTER.

1. Measure the carrier frequency at room temperature.
2. Subject the EUT to overnight soak at -30°C.
3. With the EUT, powered via nominal voltage, connected to the CMU200 and in a simulated call on mid channel of PCS 1900 and GSM850, measure the carrier frequency. These measurements should be made within 2 minutes of Powering up the EUT, to prevent significant self-warming.
4. Repeat the above measurements at 10°C increments from -30°C to +50°C. Allow at least 1 1/2 hours at each temperature, unpowered, before making measurements.
5. Remeasure carrier frequency at room temperature with nominal voltage. Vary supply voltage from minimum voltage to maximum voltage, in 0.1Volt increments remeasuring carrier frequency at each voltage. Pause at nominal voltage for 1 1/2 hours unpowered, to allow any self-heating to stabilize, before continuing.
6. Subject the EUT to overnight soak at +50°C.
7. With the EUT, powered via nominal voltage, connected to the CMU200 and in a simulated call on the centre channel, measure the carrier frequency. These measurements should be made within 2 minutes of Powering up the EUT, to prevent significant self-warming.
8. Repeat the above measurements at 10°C increments from -30°C to +50°C. Allow at least 1 1/2 hours at each temperature, unpowered, before making measurements.
9. At all temperature levels hold the temperature to +/- 0.5°C during the measurement procedure.

#### **A.3.2 Measurement Limit**

According to the JTC standard the frequency stability of the carrier shall be accurate to within 0.1 ppm of the received frequency from the base station. This accuracy is sufficient to meet Sec. 24.235, Frequency Stability. The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block. As this transceiver is considered "Hand carried, battery powered equipment" Section 2.1055(d) (2) applies. This requires that the lower voltage for frequency stability testing be specified by the manufacturer. This transceiver is specified to operate with an input voltage of between 3.6V and 4.45V, with a nominal voltage of 3.87V. Operation above or below these voltage limits is prohibited by transceiver software in order to prevent improper operation as well as to protect components from overstress. These voltages represent a tolerance from -10% to 15%. For the purposes of measuring frequency stability these voltage limits are to be used.



**A.3.3 Measurement results**

**LTE Band 2, 1.4MHz bandwidth (worst case of all bandwidths)**

**Frequency Error vs Voltage**

Voltage (V)	Frequency error (Hz)			Frequency error (ppm)		
	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
3.60	33	29	23	0.018	0.015	0.012
3.87	42	38	51	0.022	0.020	0.027
4.45	26	42	43	0.014	0.022	0.023

**Frequency Error vs Temperature**

Temperature (°C)	Frequency error (Hz)			Frequency error (ppm)		
	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
-30	26	35	28	0.014	0.019	0.015
-20	45	44	16	0.024	0.023	0.009
-10	39	24	29	0.021	0.013	0.015
0	41	26	39	0.022	0.014	0.021
10	22	31	26	0.012	0.016	0.014
20	38	33	28	0.020	0.018	0.015
30	31	38	42	0.016	0.020	0.022
40	27	39	35	0.014	0.021	0.019
50	25	29	19	0.013	0.015	0.010

Expanded measurement uncertainty is 10 Hz,  $k = 2$

**LTE Band 4, 1.4MHz bandwidth (worst case of all bandwidths)**

**Frequency Error vs Voltage**

Voltage (V)	Frequency error (Hz)			Frequency error (ppm)		
	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
3.60	28	24	25	0.016	0.014	0.014
3.87	26	33	16	0.015	0.019	0.009
4.45	39	27	38	0.023	0.016	0.022

**Frequency Error vs Temperature**

Temperature (°C)	Frequency error (Hz)			Frequency error (ppm)		
	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
-30	22	37	29	0.013	0.021	0.017
-20	47	24	29	0.027	0.014	0.017
-10	18	33	16	0.010	0.019	0.009
0	22	26	24	0.013	0.015	0.014
10	31	18	28	0.018	0.010	0.016
20	35	28	37	0.020	0.016	0.021
30	29	22	35	0.017	0.013	0.020
40	26	16	22	0.015	0.009	0.013
50	35	31	46	0.020	0.018	0.027

Expanded measurement uncertainty is 10Hz,  $k = 2$



**LTE Band 7, 5MHz bandwidth (worst case of all bandwidths)**

**Frequency Error vs Voltage**

Voltage (V)	Frequency error (Hz)			Frequency error (ppm)		
	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
3.60	-22	-29	-22	0.009	0.011	0.009
3.87	-15	18	-27	0.006	0.007	0.011
4.45	-26	-25	18	0.010	0.010	0.007

**Frequency Error vs Temperature**

Temperature (°C)	Frequency error (Hz)			Frequency error (ppm)		
	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
-30	-30	-21	-36	0.012	0.008	0.014
-20	26	21	-25	0.010	0.008	0.010
-10	-29	-18	-27	0.011	0.007	0.011
0	-25	-27	18	0.010	0.011	0.007
10	-34	26	-16	0.013	0.010	0.006
20	18	-34	-24	0.007	0.013	0.009
30	-16	-15	-28	0.006	0.006	0.011
40	-25	-33	23	0.010	0.013	0.009
50	24	29	-37	0.009	0.011	0.015

Expanded measurement uncertainty is 10 Hz, k = 2

**LTE Band 12, 1.4MHz bandwidth (worst case of all bandwidths)**

**Frequency Error vs Voltage**

Voltage (V)	Frequency error (Hz)			Frequency error (ppm)		
	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
3.60	-28	-26	-17	0.040	0.037	0.024
3.87	-15	-34	-18	0.021	0.048	0.025
4.45	-22	-27	-24	0.031	0.038	0.034

**Frequency Error vs Temperature**

Temperature (°C)	Frequency error (Hz)			Frequency error (ppm)		
	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
-30	-19	-21	-24	0.027	0.030	0.034
-20	-23	-25	-24	0.033	0.035	0.034
-10	-26	-27	-28	0.037	0.038	0.040
0	-27	-19	-19	0.038	0.027	0.027
10	-18	-18	-13	0.025	0.025	0.018
20	-26	-25	-26	0.037	0.035	0.037
30	-31	-36	-27	0.044	0.051	0.038
40	-34	-41	-33	0.048	0.058	0.047
50	-28	-28	-9	0.040	0.040	0.013

Expanded measurement uncertainty is 10Hz, k = 2

**LTE Band 26(814MHz-824MHz), 1.4MHz bandwidth (worst case of all bandwidths)**

**Frequency Error vs Voltage**

Voltage	Frequency error (Hz)	Frequency error (ppm)
---------	----------------------	-----------------------



(V)	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
3.60	12	13	19	0.015	0.016	0.023
3.87	20	16	24	0.024	0.020	0.029
4.45	31	22	29	0.038	0.027	0.035

**Frequency Error vs Temperature**

Temperature (°C)	Frequency error (Hz)			Frequency error (ppm)		
	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
-30	18	25	22	0.022	0.031	0.027
-20	27	33	20	0.033	0.040	0.024
-10	14	15	27	0.017	0.018	0.033
0	16	28	15	0.020	0.034	0.018
10	21	16	18	0.026	0.020	0.022
20	10	17	16	0.012	0.021	0.020
30	25	24	11	0.031	0.029	0.013
40	36	23	24	0.044	0.028	0.029
50	40	29	29	0.049	0.035	0.035

Expanded measurement uncertainty is 10Hz, k = 2

**LTE band 26(824MHz-849MHz), 1.4MHz bandwidth (worst case of all bandwidths)**

**Frequency Error vs Voltage**

Voltage (V)	Frequency error (Hz)			Frequency error (ppm)		
	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
3.60	28	25	18	0.033	0.030	0.022
3.87	15	20	14	0.018	0.024	0.017
4.45	17	31	26	0.020	0.037	0.031

**Frequency Error vs Temperature**

Temperature (°C)	Frequency error (Hz)			Frequency error (ppm)		
	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
-30	19	20	24	0.023	0.024	0.029
-20	10	30	10	0.012	0.036	0.012
-10	14	25	15	0.017	0.030	0.018
0	15	26	17	0.018	0.031	0.020
10	18	27	22	0.022	0.032	0.026
20	20	18	16	0.024	0.022	0.019
30	26	11	13	0.031	0.013	0.016
40	23	16	11	0.027	0.019	0.013
50	24	19	29	0.029	0.023	0.035

Expanded measurement uncertainty is 10Hz, k = 2





**LTE Band 41, 5MHz bandwidth (worst case of all bandwidths)**

**Frequency Error vs Voltage**

Voltage (V)	Frequency error (Hz)			Frequency error (ppm)		
	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
3.60	22	23	11	0.008	0.009	0.004
3.87	15	30	26	0.006	0.012	0.010
4.45	28	26	22	0.011	0.010	0.008

**Frequency Error vs Temperature**

Temperature (°C)	Frequency error (Hz)			Frequency error (ppm)		
	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
-30	-26	15	21	0.010	0.006	0.008
-20	24	31	13	0.009	0.012	0.005
-10	30	33	14	0.012	0.013	0.005
0	16	25	27	0.006	0.010	0.010
10	25	21	34	0.010	0.008	0.013
20	18	26	18	0.007	0.010	0.007
30	17	24	29	0.007	0.009	0.011
40	29	31	26	0.011	0.012	0.010
50	23	12	35	0.009	0.005	0.013

Expanded measurement uncertainty is 10 Hz,  $k = 2$

**LTE Band 66, 1.4MHz bandwidth (worst case of all bandwidths)**

**Frequency Error vs Voltage**

Voltage (V)	Frequency error (Hz)			Frequency error (ppm)		
	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
3.60	28	10	31	0.016	0.006	0.018
3.87	15	20	25	0.009	0.011	0.014
4.45	35	26	16	0.020	0.015	0.009

**Frequency Error vs Temperature**

Temperature (°C)	Frequency error (Hz)			Frequency error (ppm)		
	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
-30	27	30	33	0.015	0.017	0.019
-20	33	25	23	0.019	0.014	0.013
-10	26	30	26	0.015	0.017	0.015
0	24	24	15	0.014	0.014	0.009
10	18	41	18	0.010	0.023	0.010
20	20	31	16	0.011	0.018	0.009
30	25	36	17	0.014	0.021	0.010
40	19	22	28	0.011	0.013	0.016
50	35	27	22	0.020	0.015	0.013

Expanded measurement uncertainty is 10 Hz,  $k = 2$



**A.4 OCCUPIED BANDWIDTH**

**Reference**

FCC: CFR Part 2.1049, 22.917, 24.238, 27.53, 90.1215.

**A.4.1 Occupied Bandwidth Results**

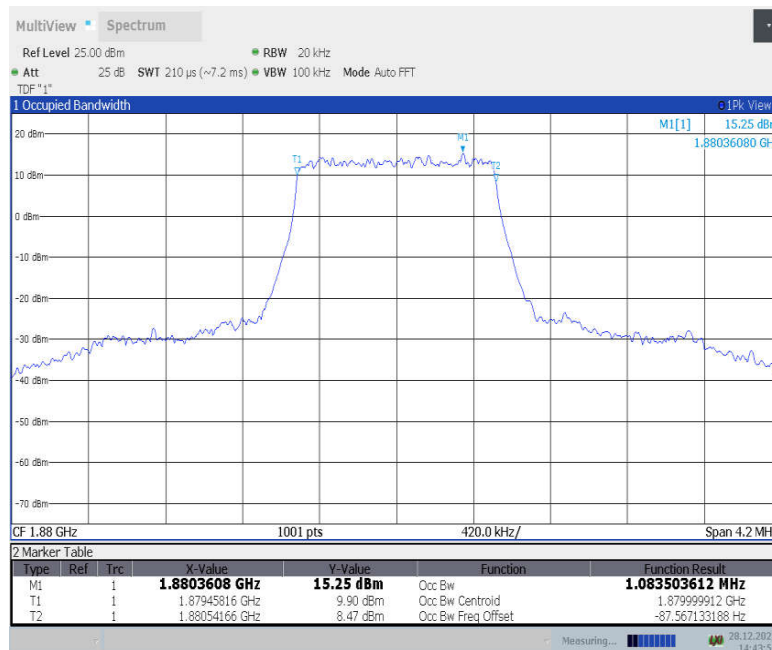
Occupied bandwidth measurements are only provided for selected frequencies in order to reduce the amount of submitted data. Data were taken at the extreme and mid frequencies of the US Cellular/PCS frequency bands. The table below lists the measured 99% BW. Spectrum analyzer plots are included on the following pages.

- a) The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be set wide enough to capture all modulation products including the emission skirts (i.e., two to five times the OBW).
- b) The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1 to 5 % of the anticipated OBW, and the VBW shall be at least 3 times the RBW.
- c) Set the reference level of the instrument as required to keep the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope must be at least 10log (OBW / RBW) below the reference level.
- d) Set the detection mode to peak, and the trace mode to max hold.
- e) Use the 99 % power bandwidth function of the spectrum analyzer and report the measured bandwidth.

**LTE band 2, 1.4MHz (99% BW)**

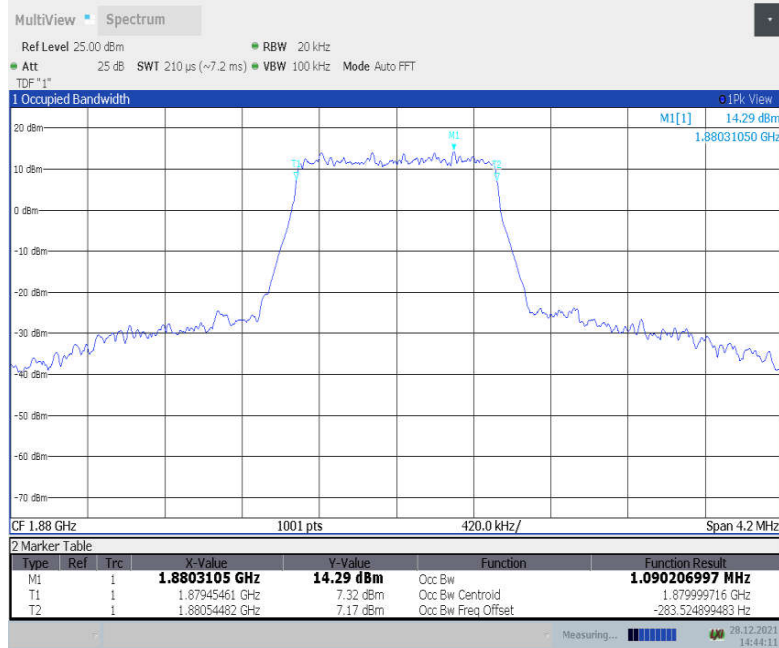
Frequency(MHz)	Occupied Bandwidth (99% BW)(kHz)		
	QPSK	16QAM	64QAM
1880.0	1083.50	1090.21	1085.93

**LTE band 2, 1.4MHz Bandwidth, QPSK (99% BW)**

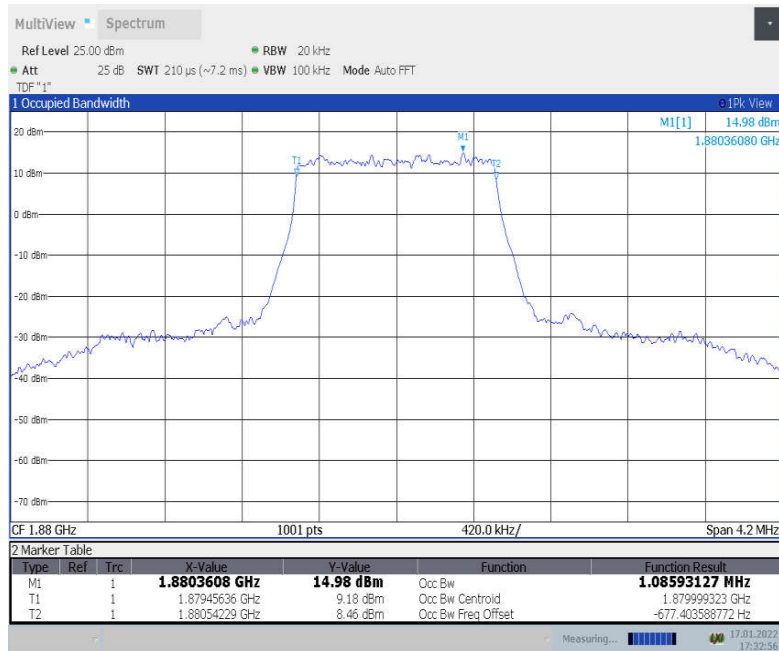




**LTE band 2, 1.4MHz Bandwidth, 16QAM (99% BW)**



**LTE band 2, 1.4MHz Bandwidth, 64QAM (99% BW)**

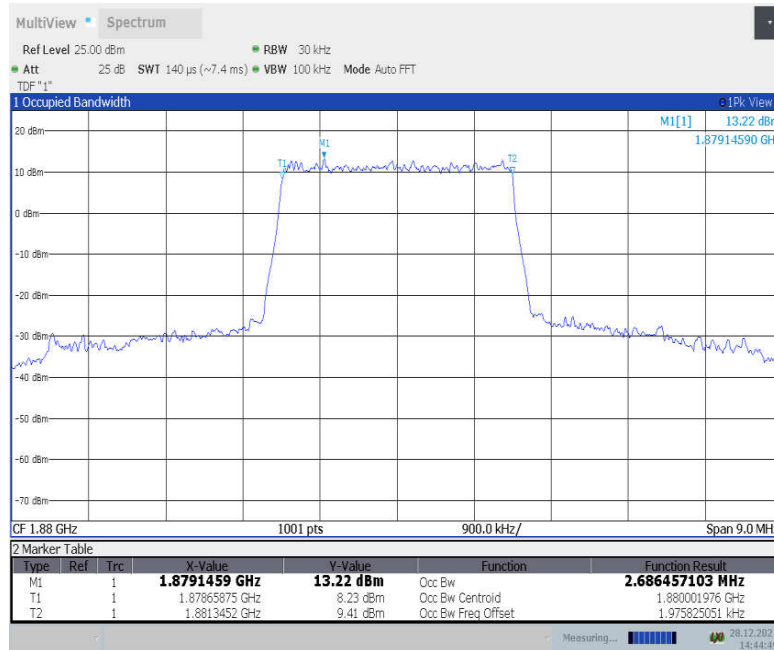




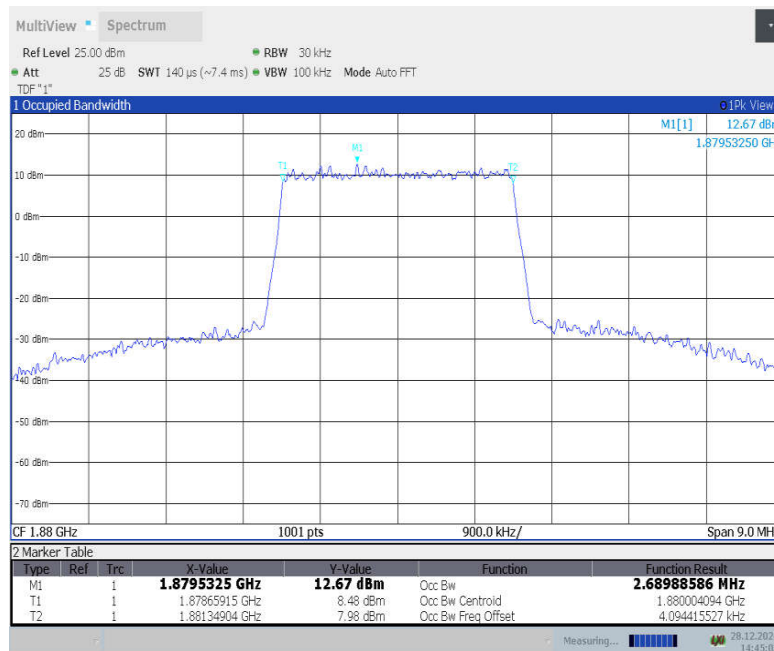
**LTE band 2, 3MHz (99% BW)**

Frequency(MHz)	Occupied Bandwidth (99% BW)(kHz)		
	QPSK	16QAM	64QAM
1880.0	2686.46	2689.89	2687.51

**LTE band 2, 3MHz Bandwidth, QPSK (99% BW)**

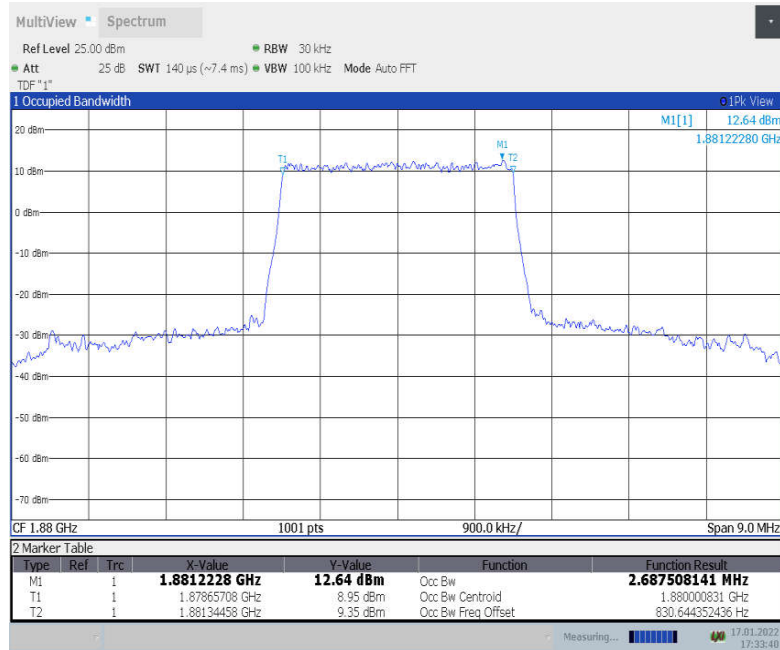


**LTE band 2, 3MHz Bandwidth, 16QAM (99% BW)**





**LTE band 2, 3MHz Bandwidth, 64QAM (99% BW)**

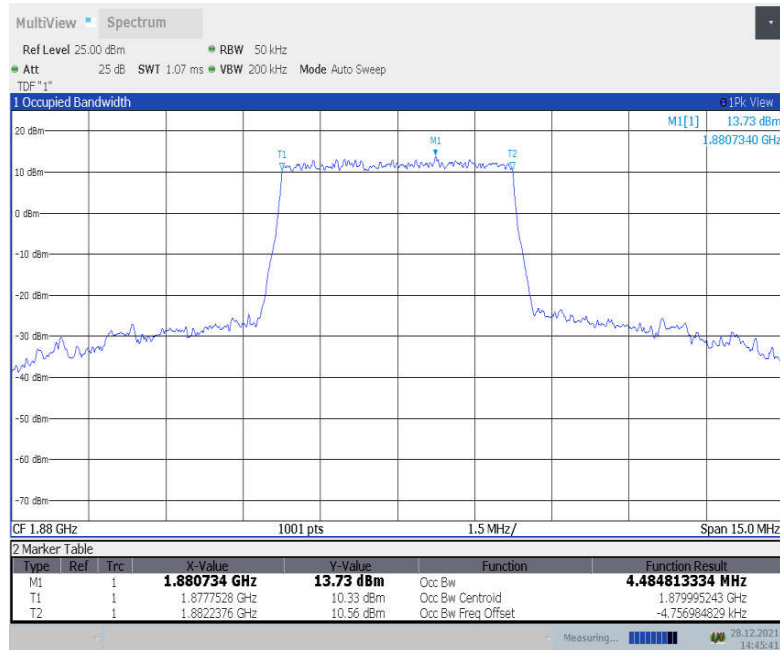




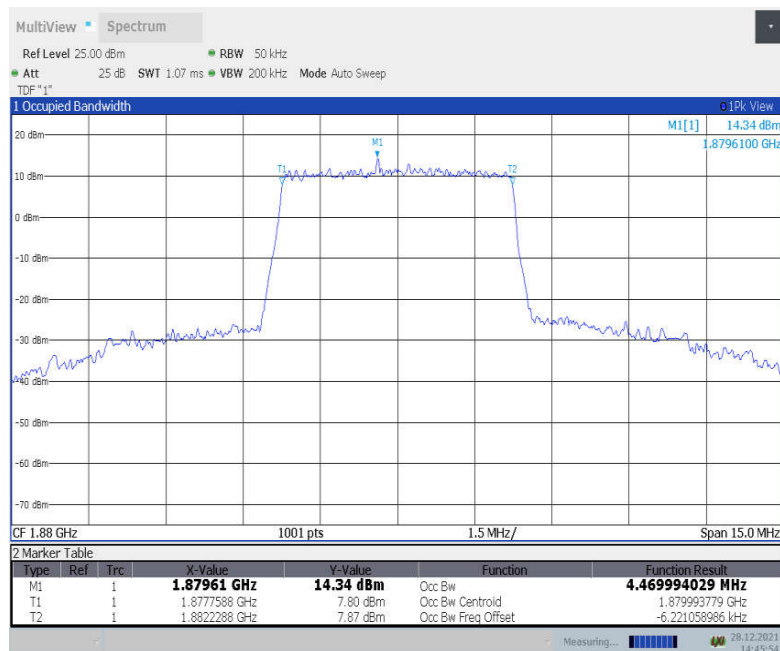
**LTE band 2, 5MHz (99% BW)**

Frequency(MHz)	Occupied Bandwidth (99% BW)(kHz)		
	QPSK	16QAM	64QAM
1880.0	4484.81	4469.99	4485.01

**LTE band 2, 5MHz Bandwidth, QPSK (99% BW)**

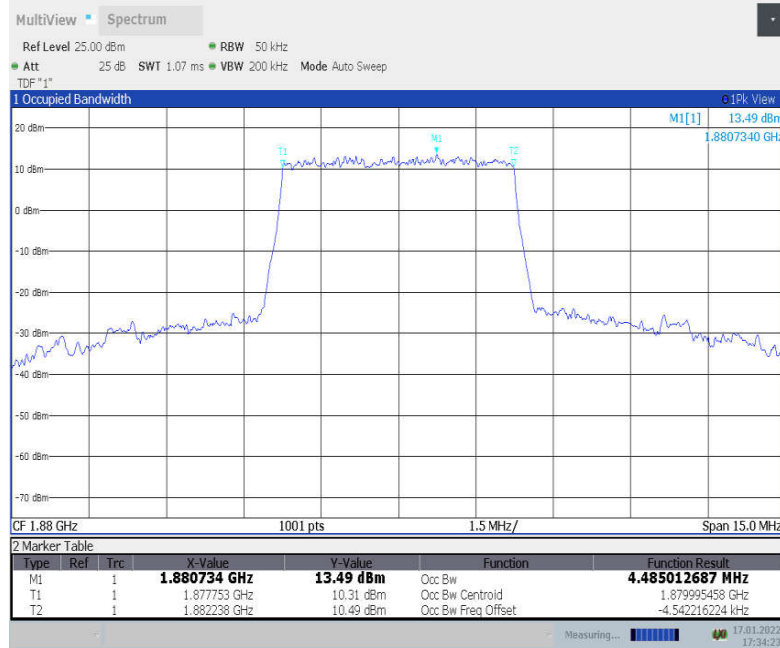


**LTE band 2, 5MHz Bandwidth,16QAM (99% BW)**





**LTE band 2, 5MHz Bandwidth,64QAM (99% BW)**

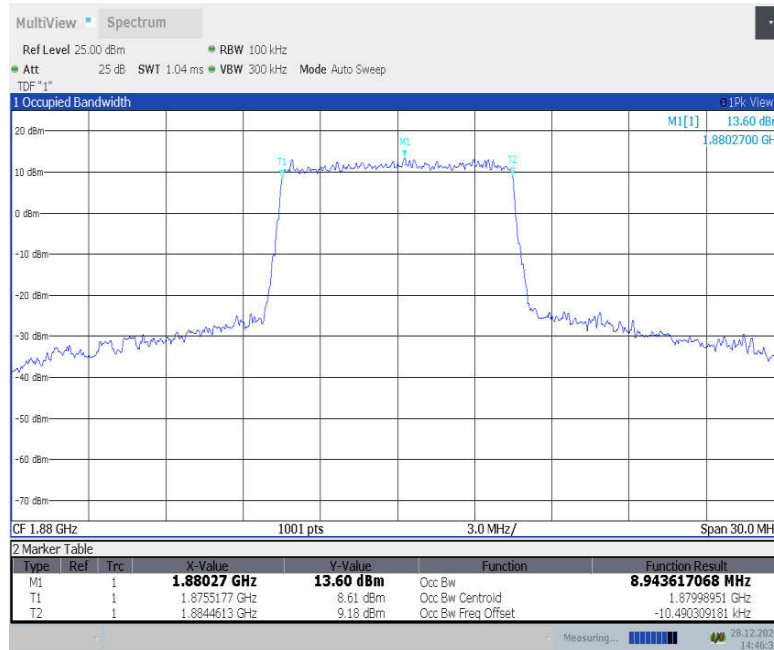




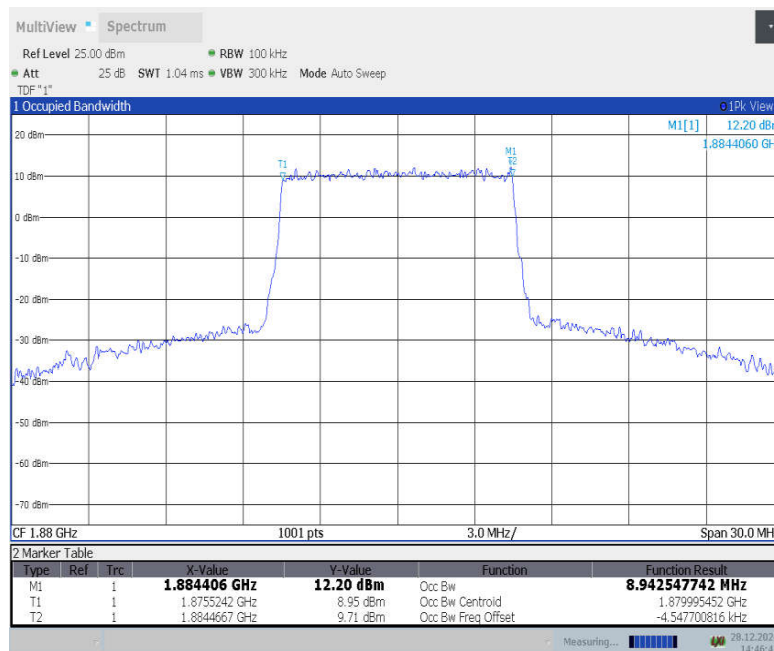
**LTE band 2, 10MHz (99% BW)**

Frequency(MHz)	Occupied Bandwidth (99% BW)(kHz)		
	1880.0	QPSK	16QAM
8943.62		8942.55	8934.51

**LTE band 2, 10MHz Bandwidth, QPSK (99% BW)**



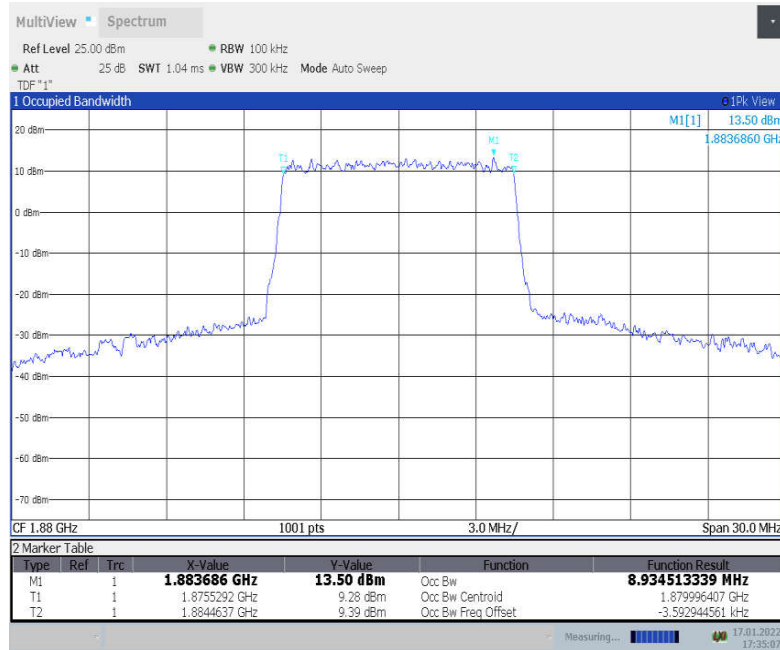
**LTE band 2, 10MHz Bandwidth, 16QAM (99% BW)**







**LTE band 2, 10MHz Bandwidth, 64QAM (99% BW)**

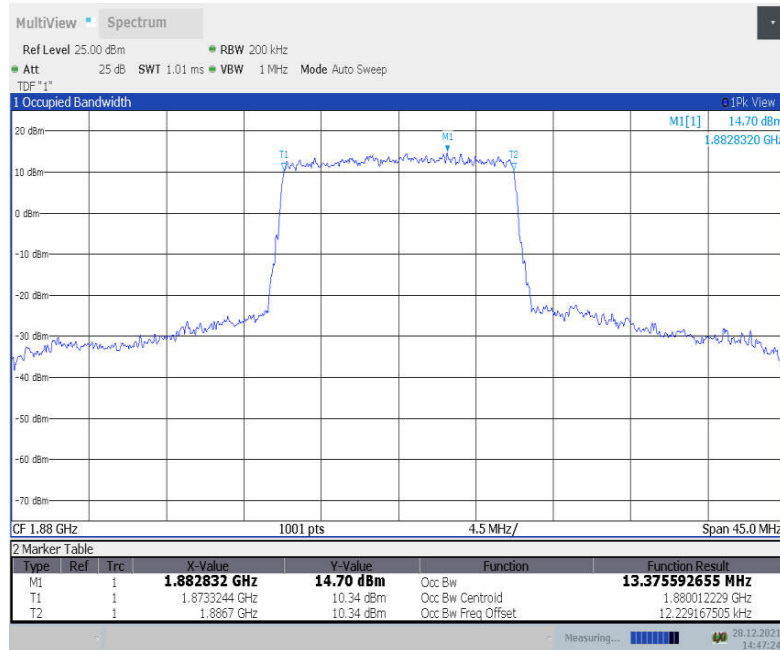




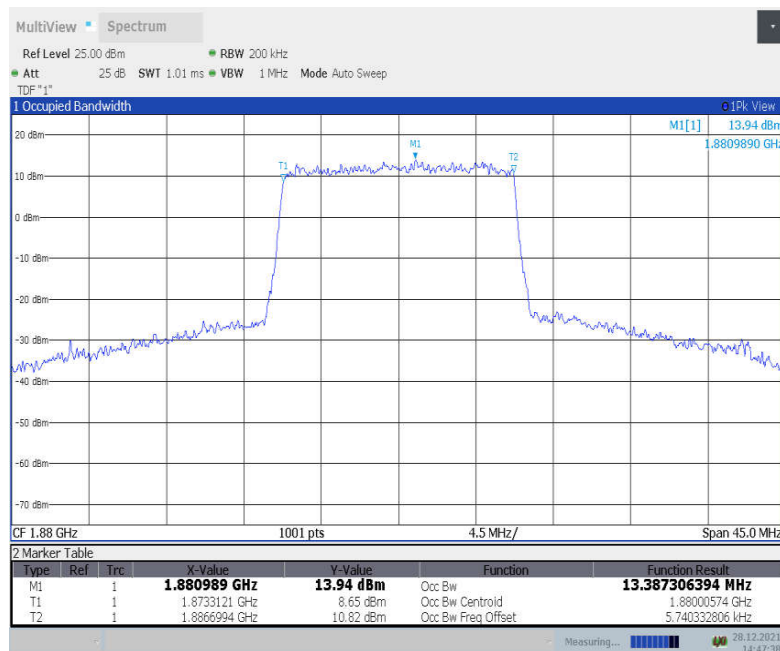
**LTE band 2, 15MHz (99% BW)**

Frequency(MHz)	Occupied Bandwidth (99% BW)(kHz)		
	QPSK	16QAM	64QAM
1880.0	13375.59	13387.31	13438.44

**LTE band 2, 15MHz Bandwidth, QPSK (99% BW)**

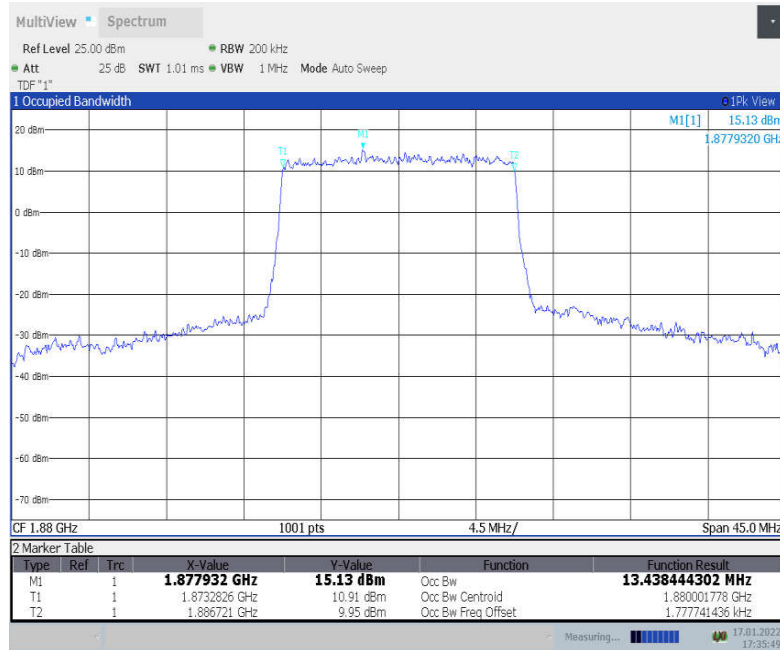


**LTE band 2, 15MHz Bandwidth, 16QAM (99% BW)**





**LTE band 2, 15MHz Bandwidth, 64QAM (99% BW)**

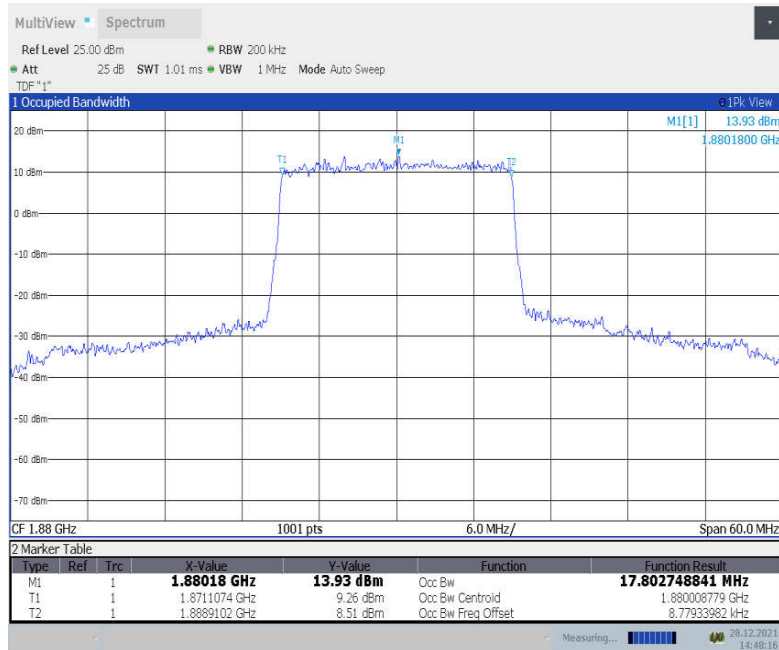




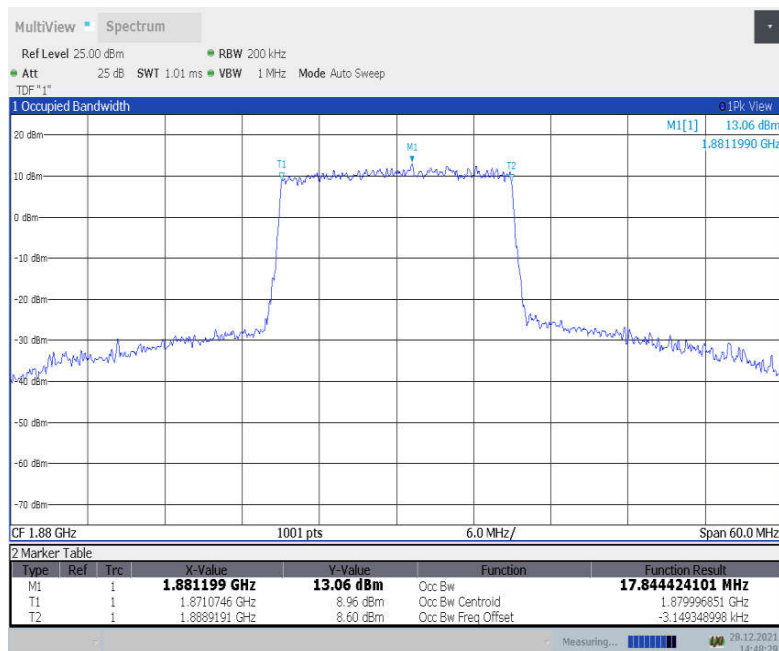
**LTE band 2, 20MHz (99% BW)**

Frequency(MHz)	Occupied Bandwidth (99% BW)(kHz)		
	1880.0	QPSK	16QAM
17802.75		17844.42	17825.28

**LTE band 2, 20MHz Bandwidth, QPSK (99% BW)**

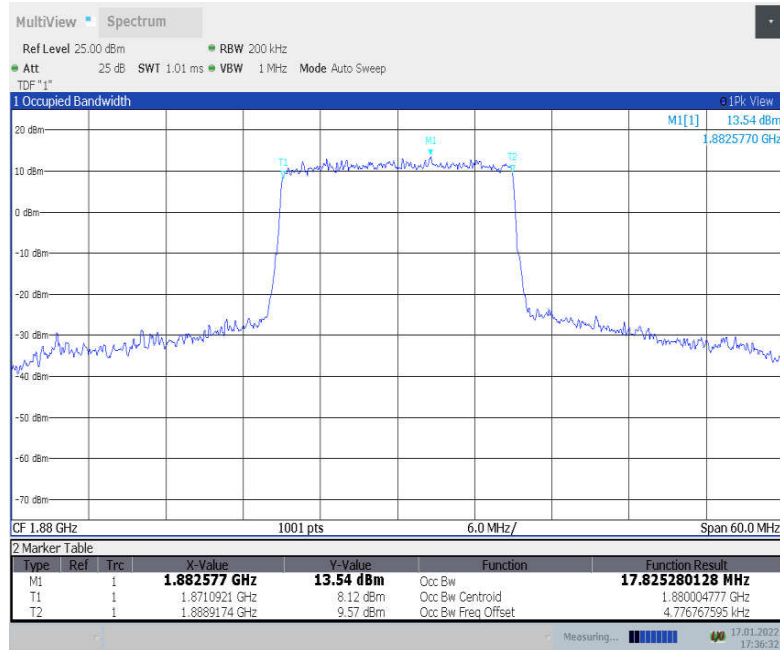


**LTE band 2, 20MHz Bandwidth, 16QAM (99% BW)**





**LTE band 2, 20MHz Bandwidth, 64QAM (99% BW)**

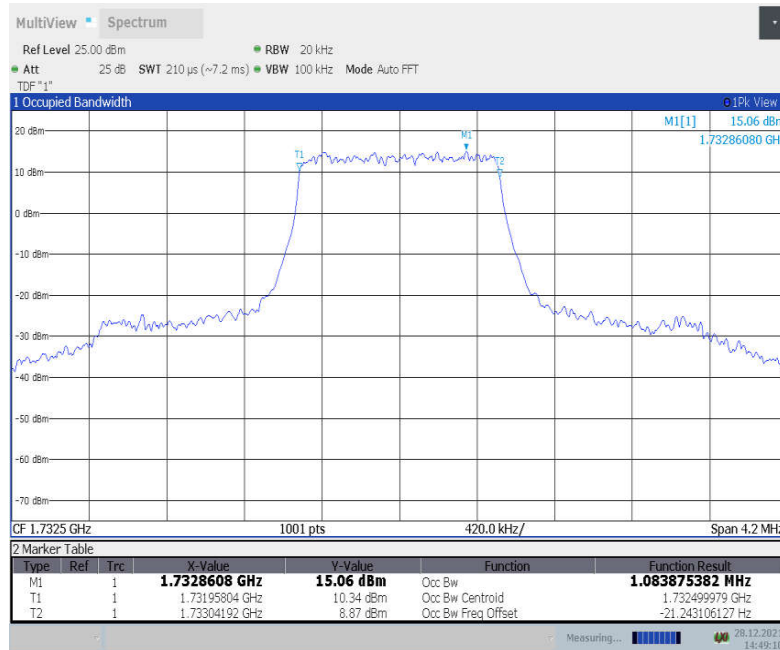




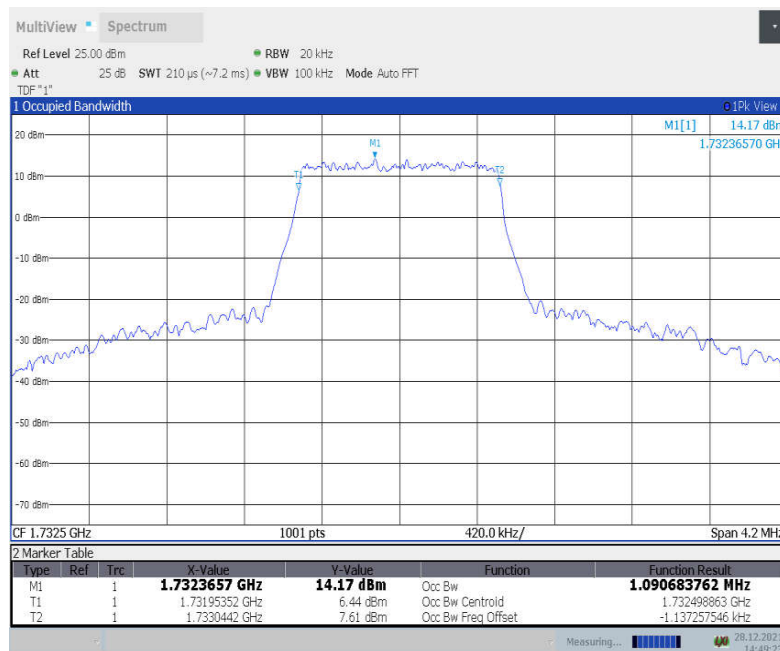
**LTE band 4, 1.4MHz (99% BW)**

Frequency(MHz)	Occupied Bandwidth (99% BW)(kHz)		
1732.5	QPSK	16QAM	64QAM
	1083.88	1090.68	1083.65

**LTE band 4, 1.4MHz Bandwidth, QPSK (99% BW)**

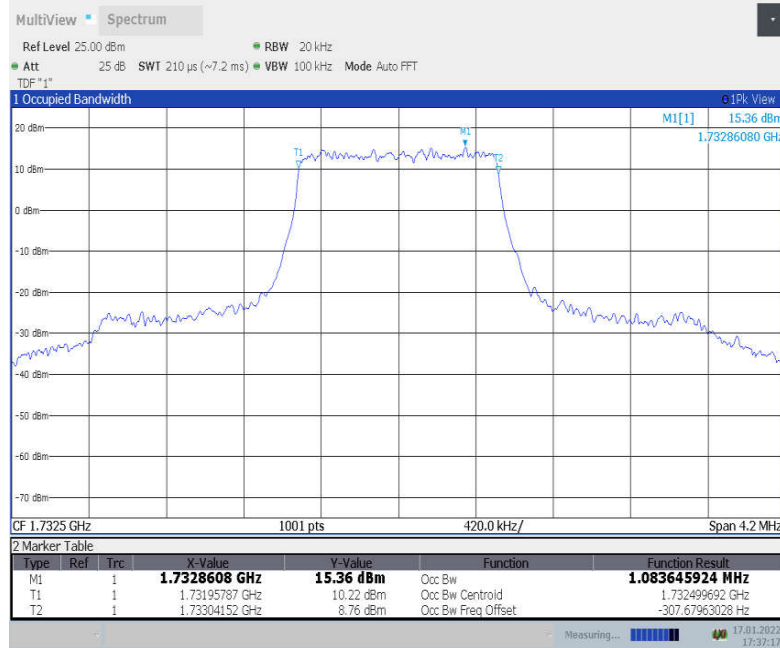


**LTE band 4, 1.4MHz Bandwidth, 16QAM (99% BW)**





**LTE band 4, 1.4MHz Bandwidth, 64QAM (99% BW)**

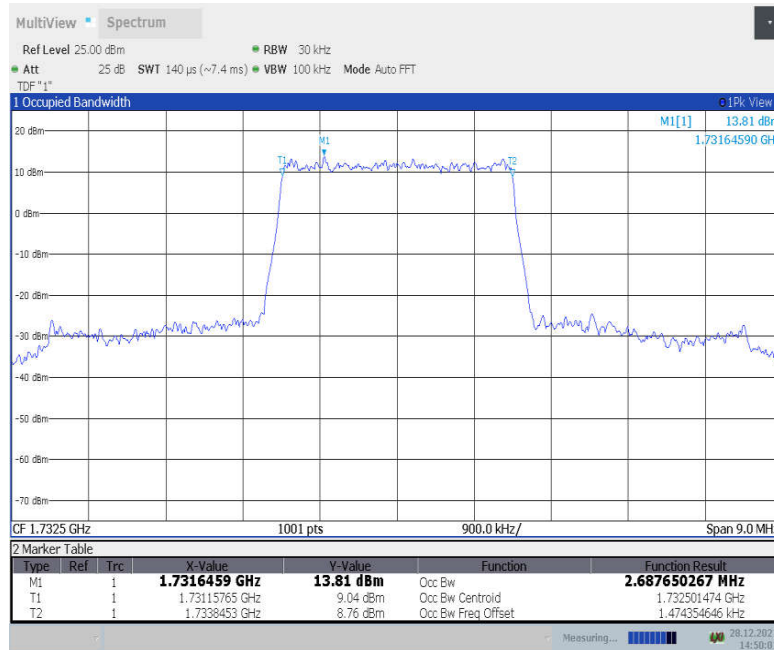




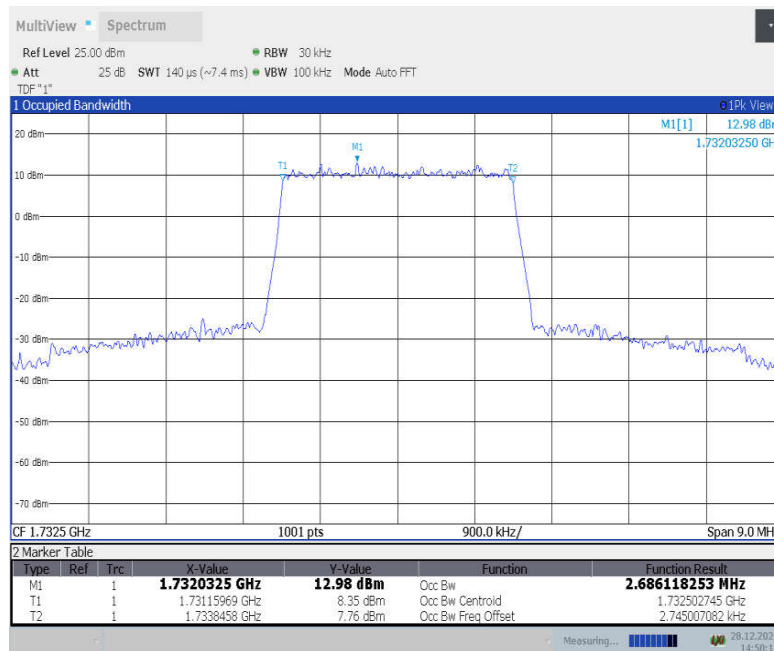
**LTE band 4, 3MHz (99% BW)**

Frequency(MHz)	Occupied Bandwidth (99% BW)(kHz)		
	QPSK	16QAM	64QAM
1732.5	2687.65	2686.12	2691.26

**LTE band 4, 3MHz Bandwidth, QPSK (99% BW)**



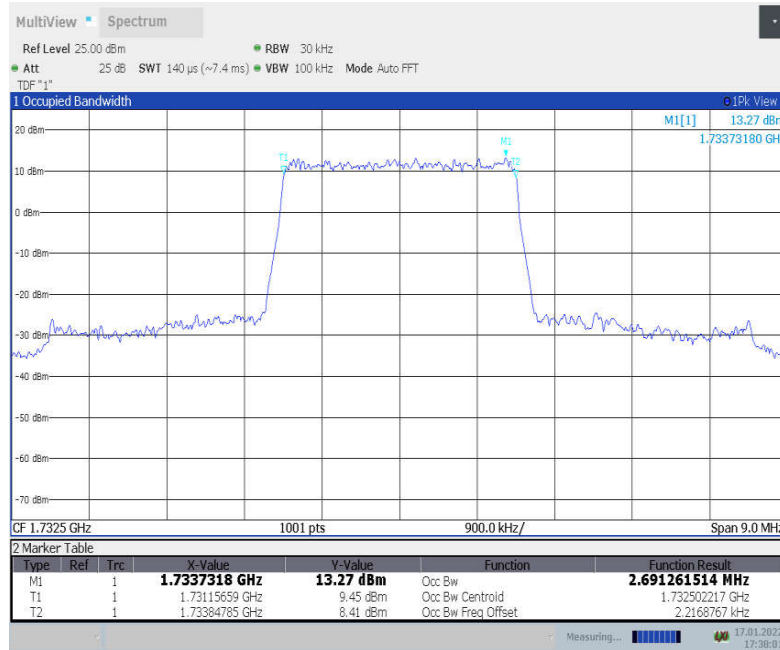
**LTE band 4, 3MHz Bandwidth, 16QAM (99% BW)**







**LTE band 4, 3MHz Bandwidth, 64QAM (99% BW)**

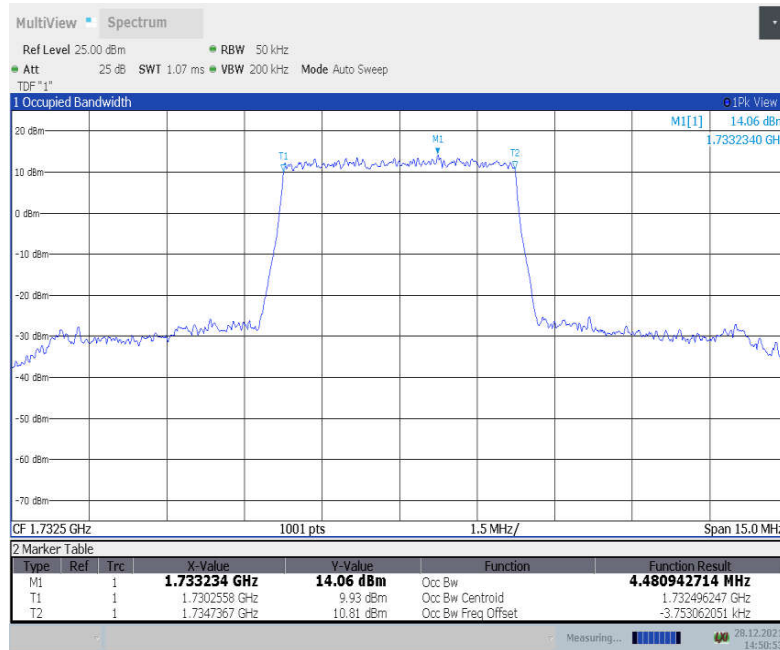




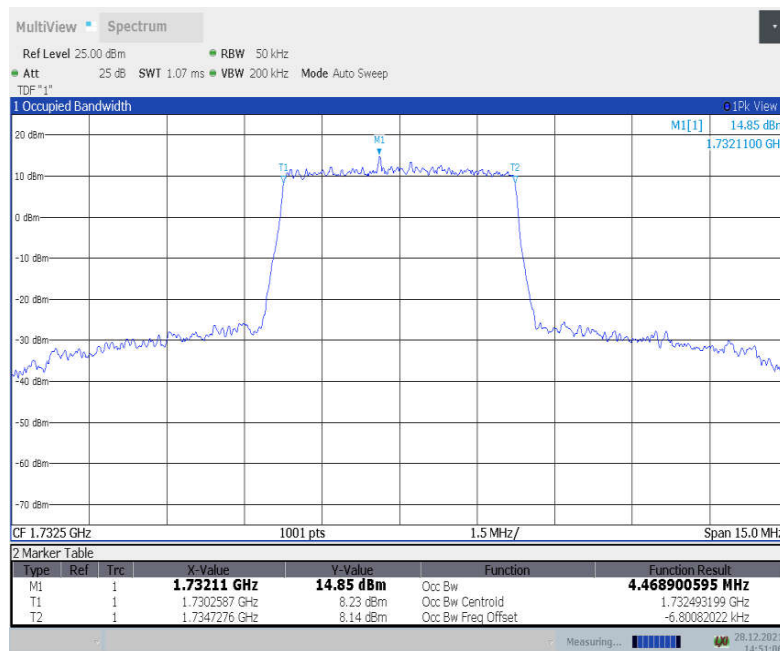
**LTE band 4, 5MHz (99% BW)**

Frequency(MHz)	Occupied Bandwidth (99% BW)(kHz)		
1732.5	QPSK	16QAM	64QAM
	4480.94	4468.90	4483.33

**LTE band 4, 5MHz Bandwidth, QPSK (99% BW)**

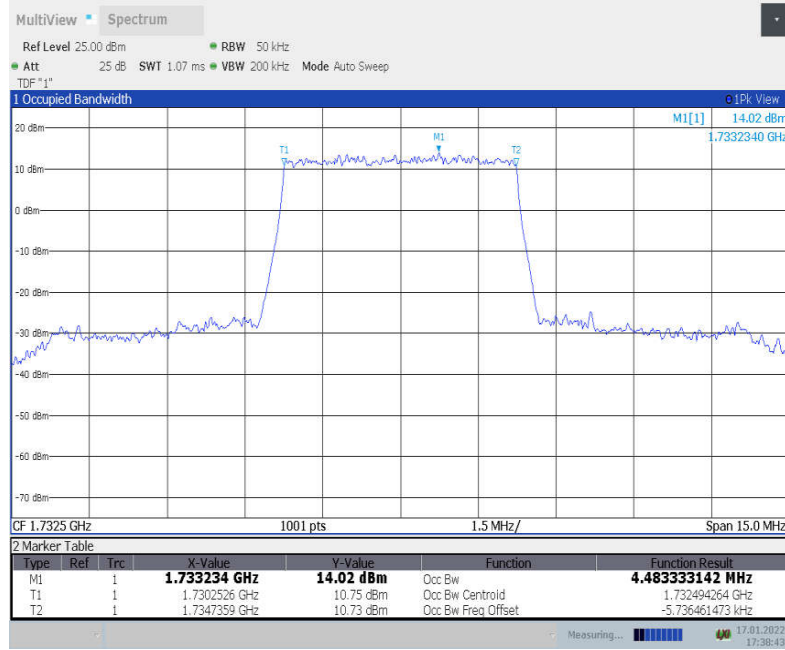


**LTE band 4, 5MHz Bandwidth,16QAM (99% BW)**





**LTE band 4, 5MHz Bandwidth,64QAM (99% BW)**

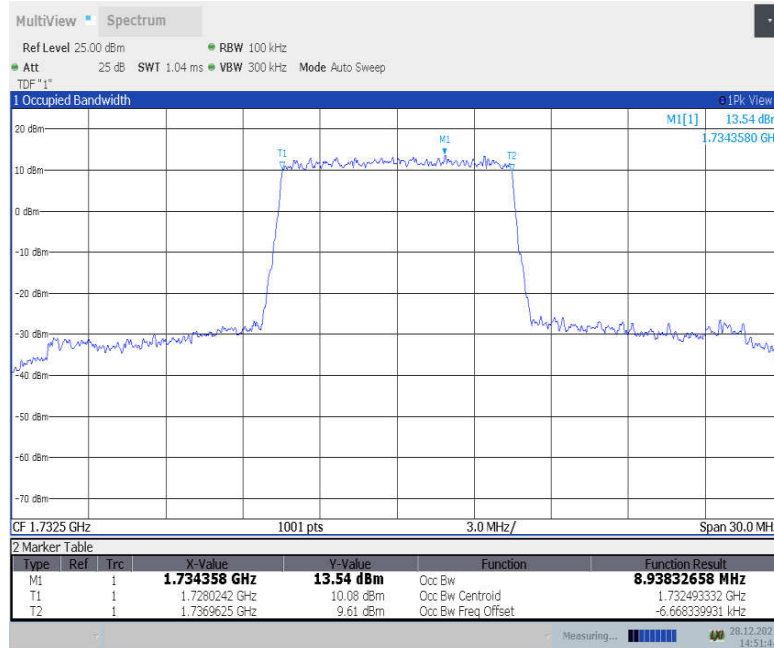




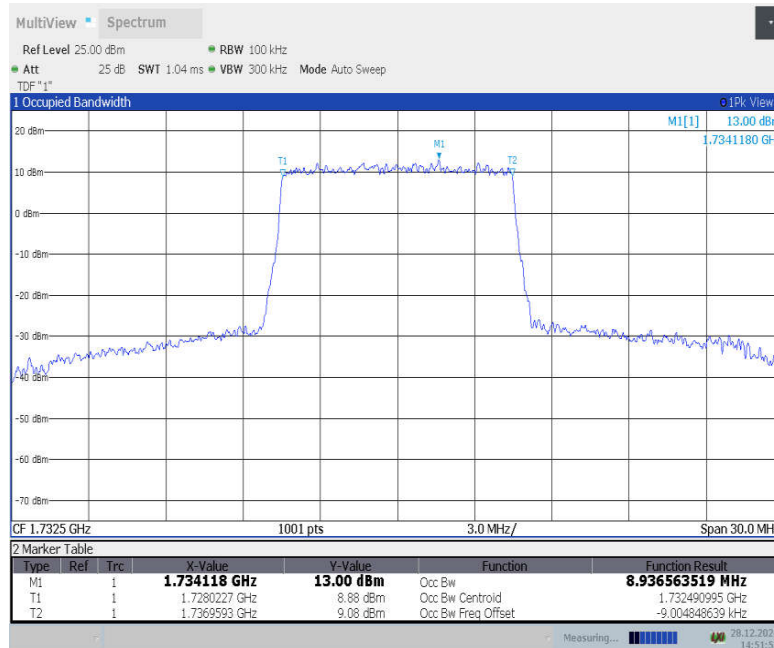
**LTE band 4, 10MHz (99% BW)**

Frequency(MHz)	Occupied Bandwidth (99% BW)(kHz)		
1732.5	QPSK	16QAM	64QAM
	8938.32	8936.56	8945.20

**LTE band 4, 10MHz Bandwidth, QPSK (99% BW)**

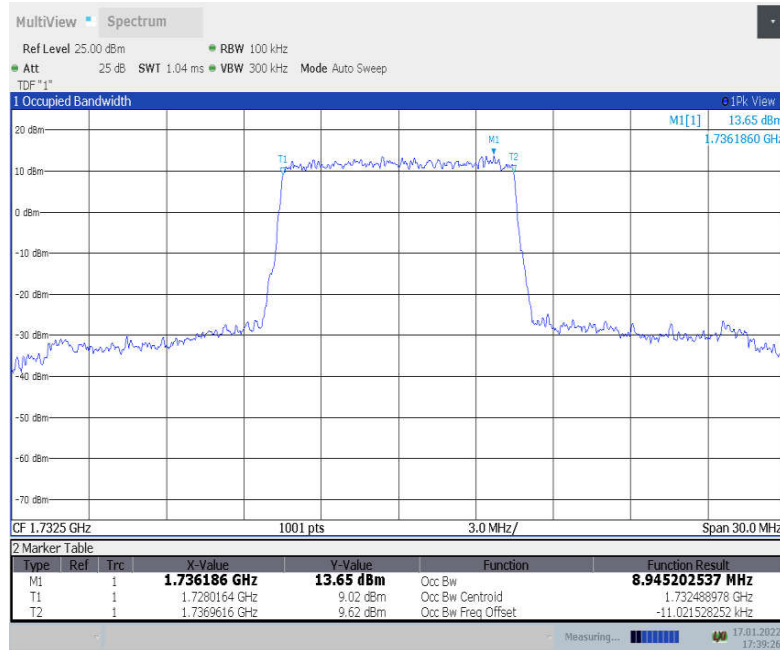


**LTE band 4, 10MHz Bandwidth, 16QAM (99% BW)**





**LTE band 4, 10MHz Bandwidth, 64QAM (99% BW)**

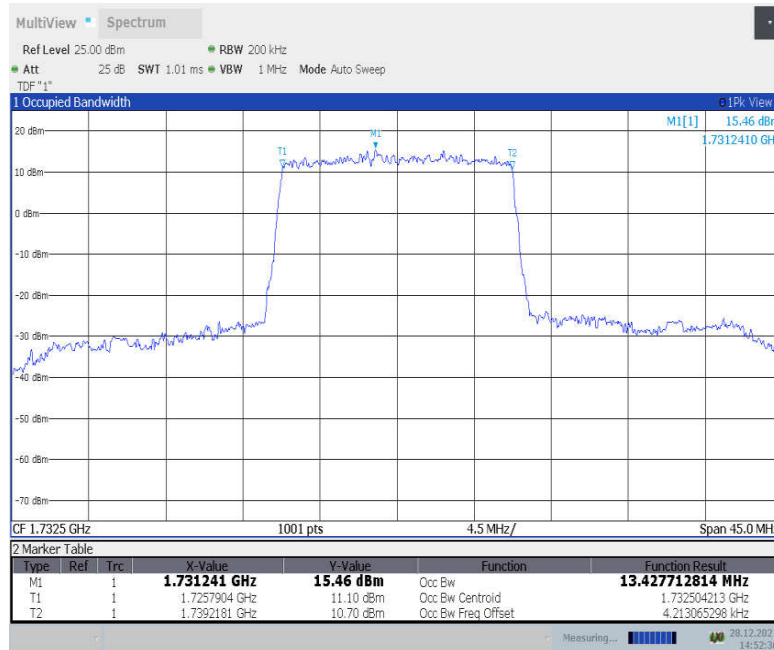




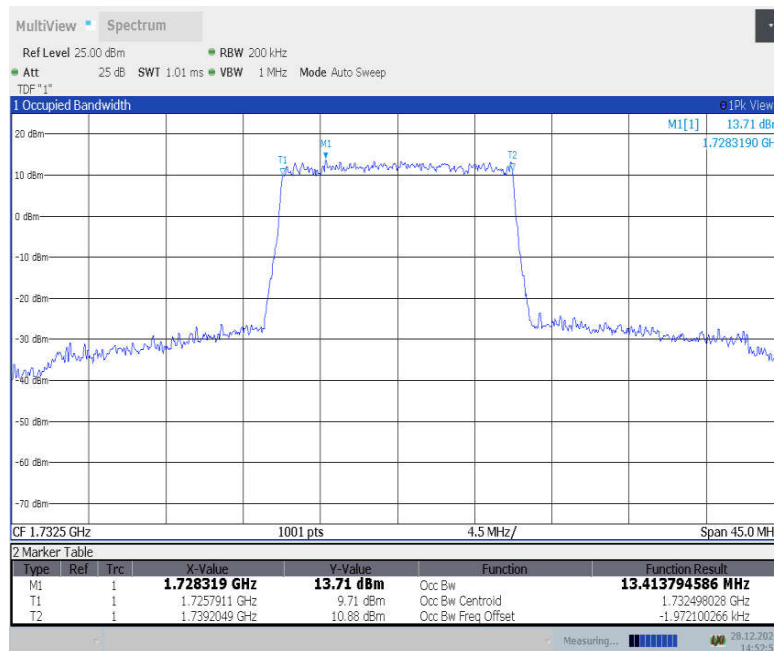
**LTE band 4, 15MHz (99% BW)**

Frequency(MHz)	Occupied Bandwidth (99% BW)(kHz)		
1732.5	QPSK	16QAM	64QAM
	13427.71	13413.79	13428.94

**LTE band 4, 15MHz Bandwidth, QPSK (99% BW)**

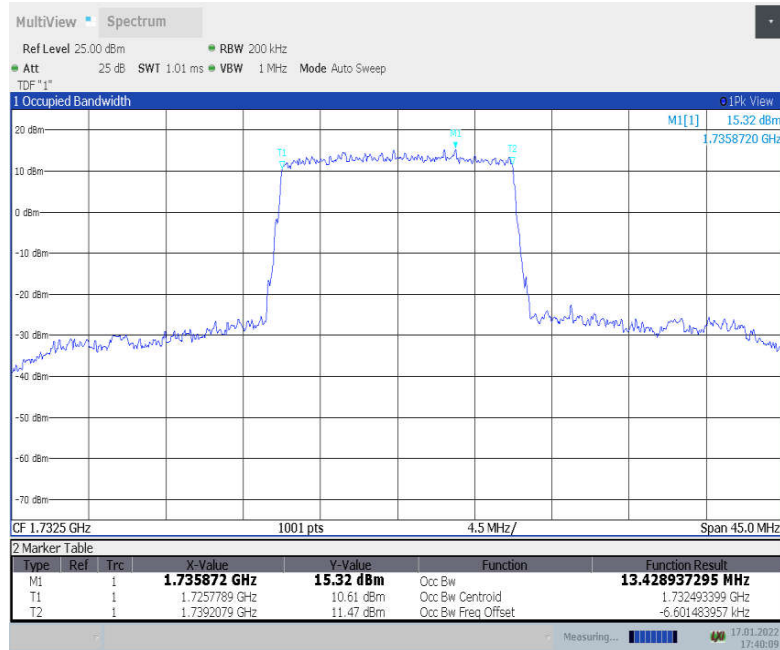


**LTE band 4, 15MHz Bandwidth, 16QAM (99% BW)**





**LTE band 4, 15MHz Bandwidth, 64QAM (99% BW)**

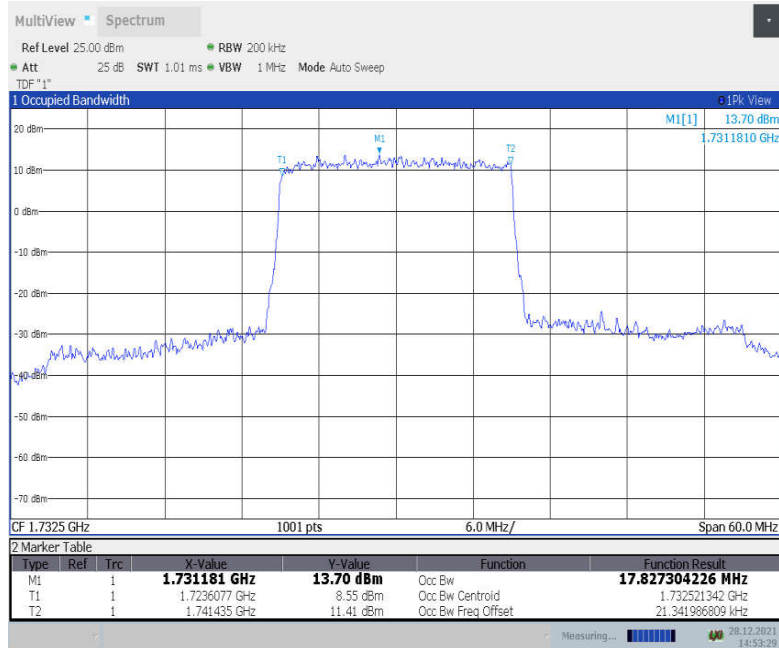




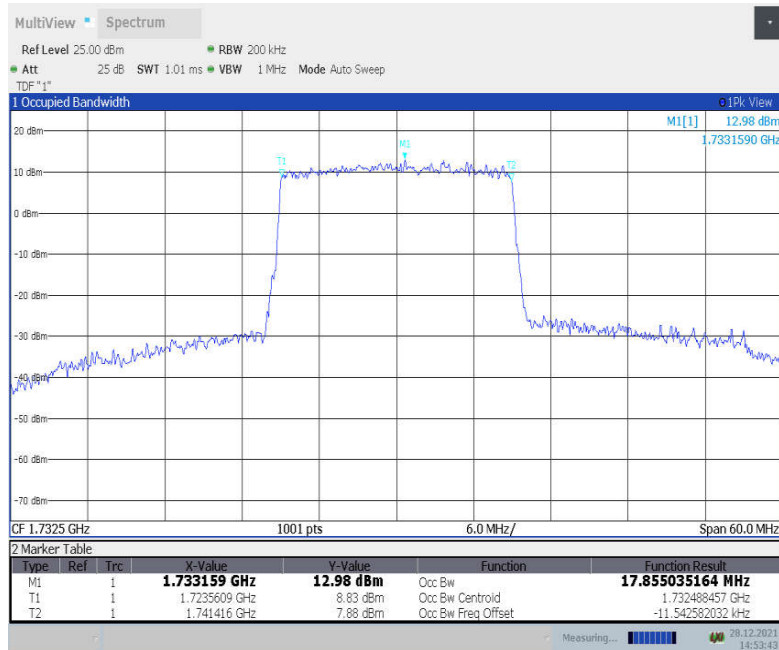
**LTE band 4, 20MHz (99% BW)**

Frequency(MHz)	Occupied Bandwidth (99% BW)(kHz)		
1732.5	QPSK	16QAM	64QAM
	17827.30	17855.04	17824.96

**LTE band 4, 20MHz Bandwidth, QPSK (99% BW)**



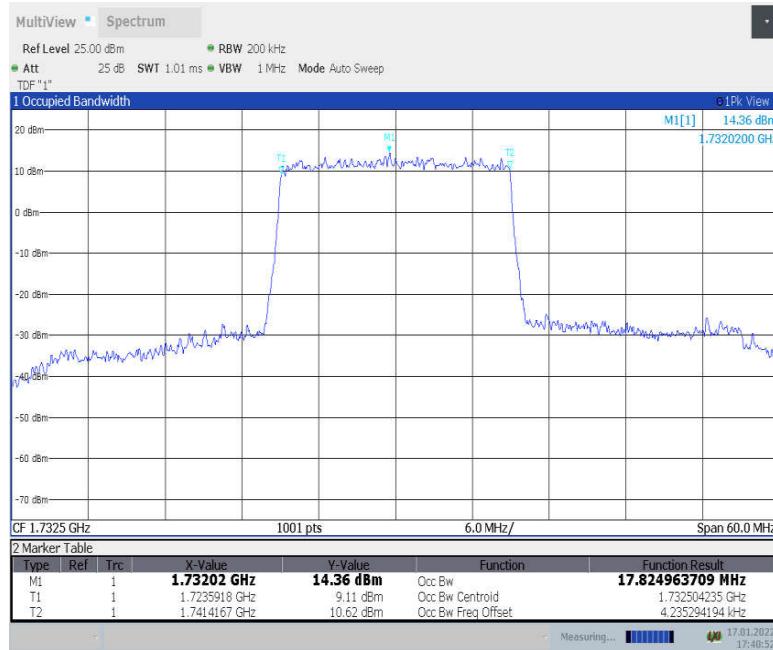
**LTE band 4, 20MHz Bandwidth, 16QAM (99% BW)**







**LTE band 4, 20MHz Bandwidth, 64QAM (99% BW)**

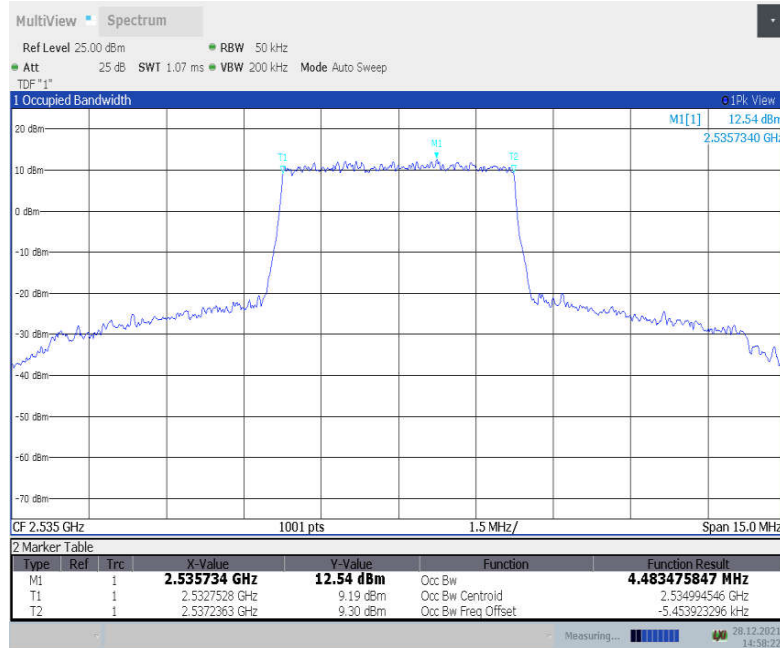




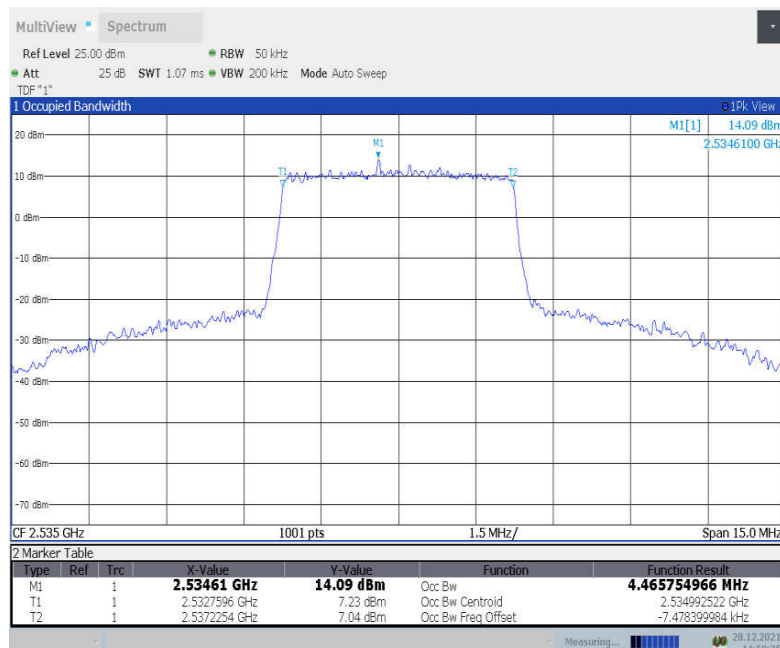
**LTE band 7, 5MHz (99% BW)**

Frequency(MHz)	Occupied Bandwidth (99% BW)(kHz)		
2535.0	QPSK	16QAM	64QAM
	4483.48	4465.75	4484.41

**LTE band 7, 5MHz Bandwidth, QPSK (99% BW)**

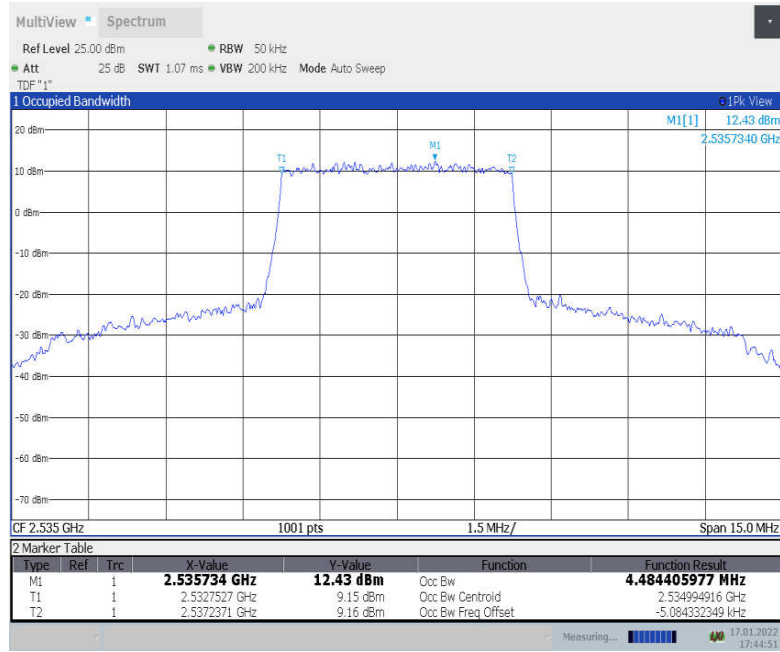


**LTE band 7, 5MHz Bandwidth,16QAM (99% BW)**





**LTE band 7, 5MHz Bandwidth, 64QAM (99% BW)**

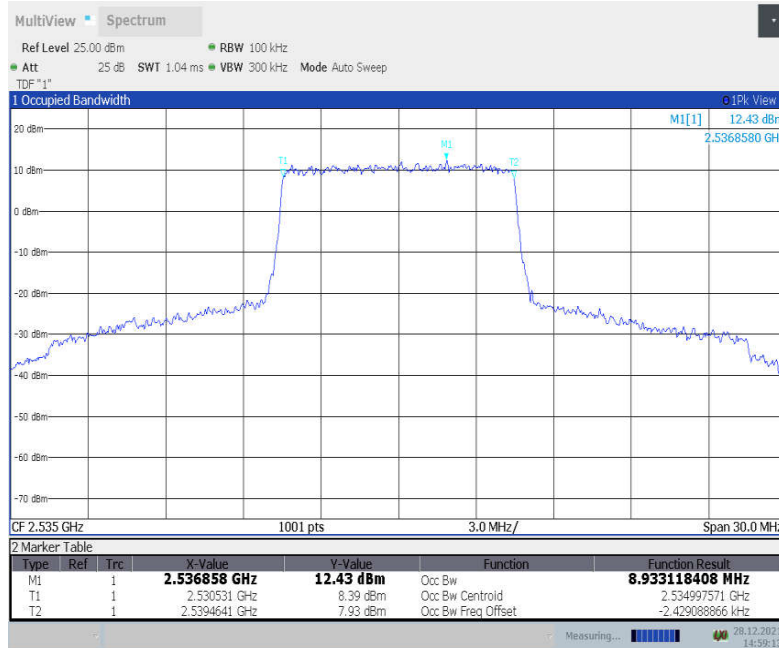




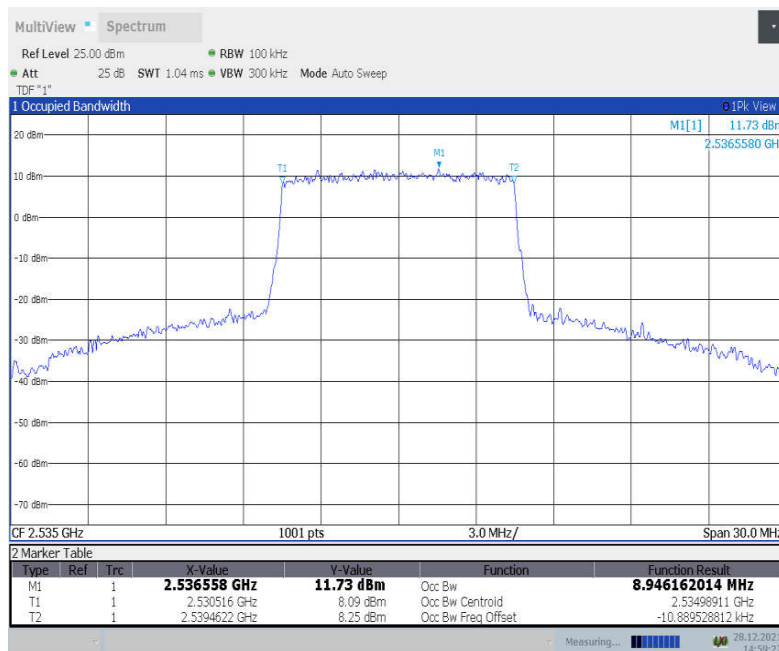
**LTE band 7, 10MHz (99% BW)**

Frequency(MHz)	Occupied Bandwidth (99% BW)(kHz)		
	QPSK	16QAM	64QAM
2535.0	8933.12	8946.16	8948.48

**LTE band 7, 10MHz Bandwidth, QPSK (99% BW)**

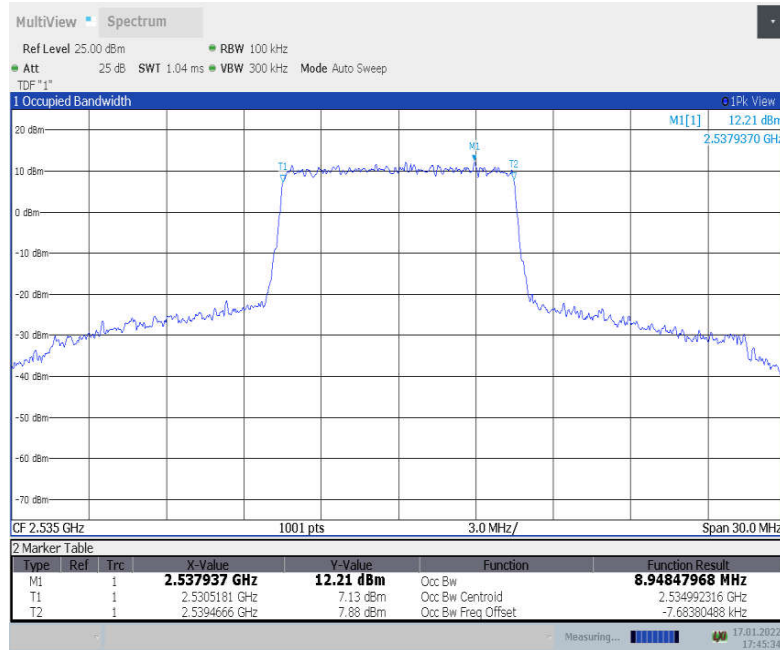


**LTE band 7, 10MHz Bandwidth, 16QAM (99% BW)**





**LTE band 7, 10MHz Bandwidth, 64QAM (99% BW)**

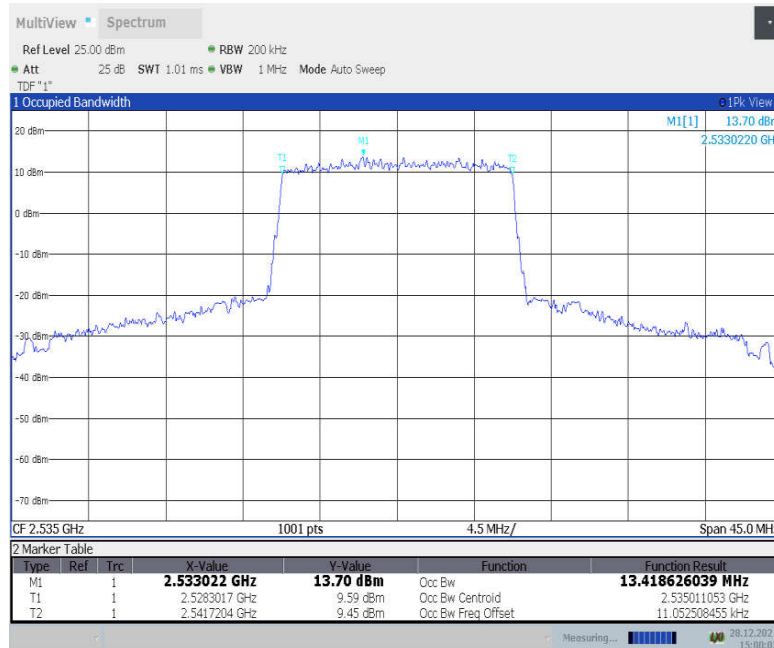




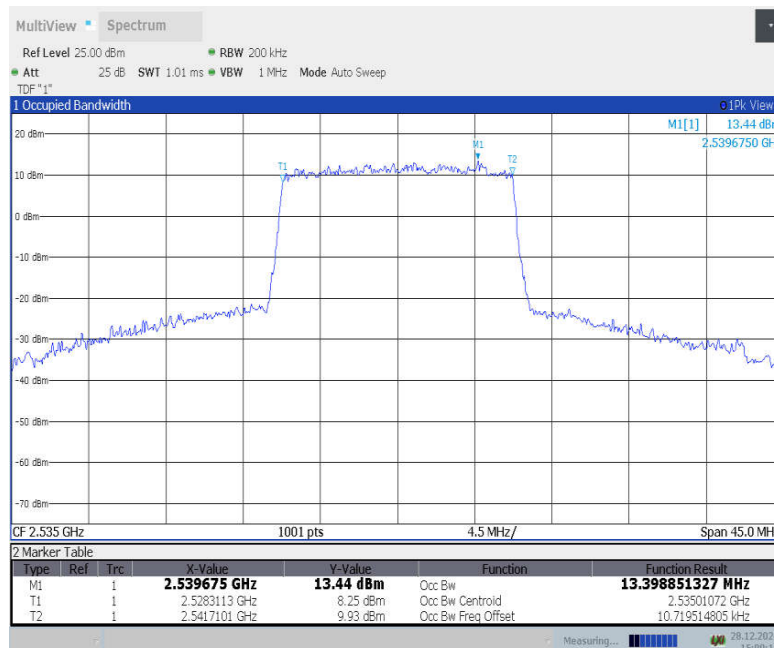
**LTE band 7, 15MHz (99% BW)**

Frequency(MHz)	Occupied Bandwidth (99% BW)(kHz)		
2535.0	QPSK	16QAM	64QAM
	13418.63	13398.85	13408.93

**LTE band 7, 15MHz Bandwidth, QPSK (99% BW)**



**LTE band 7, 15MHz Bandwidth, 16QAM (99% BW)**





**LTE band 7, 15MHz Bandwidth, 64QAM (99% BW)**

